

Federal Funds for Research and Development

Fiscal Years 1997, 1998, and 1999

Volume 47

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences



National Science Foundation

February 1999

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Ronald L. Meeks, Project Officer

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Directorate for Social, Behavioral, and Economic Sciences

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National Science Foundation
Division of Science Resources Studies
4201 Wilson Blvd., Suite 965
Arlington, VA 22230
Telephone: (703) 306-1780
Fax: (703) 306-0510
email: srsweb@nsf.gov

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GENERAL NOTES

Data in the tables of this publication were derived from the Survey of Federal Funds for Research and Development and cover fiscal years 1997–99. They reflect research and development (R&D) funding levels as reported by 32 Federal agencies in February through August 1998. All agencies that were identified as conducting R&D programs were surveyed.

R&D totals in these tables are given in both outlays and obligations. The R&D obligation data are further categorized according to character of work (basic research, applied research, and development), performer, field of science or engineering (for research but not for development), and Federal R&D funding by State. Obligations for research performance at universities and colleges by fields of science or engineering are also shown, as are R&D plant data.

The amounts reported for each year are expressed in obligations or outlays incurred, or expected to be incurred, in that year, regardless of when the funds may have been authorized, appropriated, or received by an agency, and regardless of whether the funds are identified in an agency's budget specifically for research, development, or R&D plant.

Data for 1997 are actual, representing completed transactions. Data for 1998 and 1999 are estimated because they do not represent final actions. The Survey of Federal Funds for Research and Development was conducted during the third quarter of fiscal year 1998. The amounts reported for 1998 reflect congressional

appropriation actions as of that period, as well as apportionment and reprogramming decisions as of that time. Data for 1999 represent administration budget proposals that had not been acted on. Authorization, appropriation, deferral, and apportionment actions that were completed after these data were collected will be reflected in later surveys of this series.

Accuracy of the data depends in part on the judgment of the respondent. Since many agency R&D programs are not identified as budget-line items, agency officials must identify R&D and R&D plant activities within broader programs. Over the years personnel of the participating agencies have developed increasing skill and consistency in meeting the survey requirements, and their interaction with the National Science Foundation staff has considerably increased the reliability of the data.

Inquiries relating to *Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999*, Volume 47, should be directed to—

Ronald L. Meeks
Research and Development Statistics Program
Division of Science Resources Studies
National Science Foundation
4201 Wilson Boulevard, Suite 965
Arlington, VA 22230

Telephone: (703) 306-1772, ext. 6937
Fax: (703) 306-0508
Internet: rmeeks@nsf.gov

Note

For trend comparison, use only the historical data for fiscal years 1978–99 contained in tables C-92 through C-111a in this Federal funds, Volume 47 series. These tables incorporate changes in prior-year data made by the agencies to reflect program reclassifications. Do not use data published earlier.

SECTION A.
TECHNICAL NOTES

SECTION A. TECHNICAL NOTES

SCOPE AND METHOD

During the period February through August 1998, a total of 32 Federal agencies and their subdivisions—93 individual respondents—submitted data in response to the National Science Foundation’s (NSF’s) annual Survey of Federal Funds for Research and Development (Federal funds survey), which was distributed in February 1998. The agencies reported their data as obligations and outlays incurred, or expected to be incurred, regardless of when the funds were appropriated or whether they were identified in the respondents’ budgets specifically for research and development (R&D) activities.

Only those agencies that had obligations in the variables represented by a particular table appear in that table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with these agencies, refer to appendix B.

DEFINITIONS

The definitions are essentially unchanged from those used in past Federal funds surveys.

1. An **agency** is an organization of the Federal Government whose principal executive officer reports to the President. The Library of Congress is also included in the survey, even though its chief officer reports to Congress. **Subdivision** refers to any organizational unit of a reporting agency, such as a bureau, division, office, or service.
2. **Obligations** and **outlays** reported are consistent with figures shown for fiscal years 1997, 1998, and 1999 appearing in *The Budget of the United States Government, Fiscal Year 1999*. The R&D data in both agency submissions were based on the same definitions and are reconcilable.

Obligations represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when future payment of money is required.

Outlays represent the amounts for checks issued and cash payments made during a given period, regardless of when the funds were appropriated.

Obligations and outlays cover all transactions that occurred in fiscal year 1997 and those estimated for fiscal years 1998 and 1999.

The data include all Federal funds available to an agency that the agency received or expects to receive from direct appropriations, trust funds, special account receipts, corporate income, or other sources, including funds appropriated to the President.

The amounts shown for each year reflect obligations or outlays for that year regardless of when the funds were originally authorized or received and regardless of whether or not they were appropriated, received, or identified in the agency’s budget specifically for research, development, or R&D plant.

In reporting its obligations or outlays, **each agency includes the amounts transferred to other agencies for support of research and development. The receiving agencies do not report funds transferred to them.** Similarly, a subdivision of an agency that transfers funds to another subdivision within that agency reports such obligations or outlays as its own.

Obligations and outlays for R&D performed for an agency in foreign countries include all funds available to the agency for this purpose, including funds separately appropriated for special foreign currency programs.

Funds reported for research and development reflect full cost coverage. In addition to costs of specific R&D projects, the applicable overhead costs are also included. The amounts reported include the costs of planning and administering R&D programs, laboratory overhead, pay of military personnel, and departmental administration.

3. The **fiscal year** in the Federal Government accounting period begins October 1 of a given year and ends September 30 of the following year; thus, fiscal year 1997 began on October 1, 1996, and ended September 30, 1997.
4. **Research, development, and R&D plant** include all direct, incidental, or related costs re-

sulting from, or necessary to, performance of R&D and costs of R&D plant, defined as follows, regardless of whether the R&D is performed by a Federal agency (intramurally) or by private individuals and organizations under grant or contract (extramurally). R&D excludes routine product testing, quality control, mapping and surveys, collection of general purpose statistics, experimental production, and the training of scientific personnel.

- a. **Research** is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objectives of the sponsoring agency.

In **basic research** the objective of the sponsoring agency is to gain more complete knowledge or understanding of the fundamental aspects of phenomena and of observable facts, without specific applications toward processes or products in mind.

In **applied research** the objective of the sponsoring agency is to gain knowledge or understanding necessary for determining the means by which a recognized need may be met.

- b. **Development** is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes. It excludes quality control, routine product testing, and production.

To better differentiate between that part of the Federal R&D budget which supports “science and key enabling technologies” (including for military and nondefense applications) and that which primarily concerns “testing and evaluation” (of mostly defense-related systems), NSF now collects from DoD development dollars in two categories, advanced technology development and major systems development.

Within DoD’s research categories, advanced technology development is classi-

fied as 6.3A. Major systems development is classified as 6.3B through 6.7 and includes demonstration and validation, engineering and manufacturing development, management and support, and operational system development.

- c. **Demonstration activities** that are part of R&D (i.e., that are intended to prove or to test whether a technology or method does in fact work) are included. Demonstrations intended primarily to make information available about new technologies or methods are excluded.
- d. **R&D plant** (R&D facilities and fixed equipment, such as reactors, wind tunnels, and particle accelerators) includes acquisition of, construction of, major repairs to, or alterations in structures, works, equipment, facilities, or land for use in R&D activities at Federal or non-Federal installations. Excluded from the R&D plant category are expendable or movable equipment (e.g., spectrometers, microscopes) and office furniture and equipment. Also excluded are the costs of predesign studies (e.g., those undertaken before commitment to a specific facility). These excluded costs are reported under “total conduct of research and development.” Obligations for foreign R&D plant are limited to Federal funds for facilities that are located abroad and used in support of foreign research and development.

- 5. **Fields of science and engineering** in this survey consist of eight broad field categories, each consisting of a number of detailed fields. The broad fields are life sciences; psychology; physical sciences; environmental sciences; mathematics and computer sciences; engineering; social sciences; and other sciences, not elsewhere classified. The term “not elsewhere classified” (n.e.c.) is used for multidisciplinary projects within a broad field and for single-discipline projects for which a separate field has not been assigned. The following list presents the detailed fields grouped under each of the broad fields, together with illustrative disciplines of detailed fields.

The illustrative disciplines are intended to be guidelines, not sharp definitions; they represent examples of disciplines generally classified under each detailed field. A discipline under one detailed field may be classified under another detailed field when the major emphasis is elsewhere. Research in biochemistry, for example, might be reported as biological, agricultural, or medical, depending on the orientation of the project. Human biochemistry would be classified under biological, but animal biochemistry or plant biochemistry would fall under agricultural. In no case is the research reported under more than one field. No double-counting is intended or allowed.

- a. **Life sciences** consist of five detailed fields: biological (excluding environmental); environmental biology; agricultural; medical; and life sciences, n.e.c. Examples of the disciplines under each of these fields are as follows:

Biological (excluding environmental): anatomy; biochemistry; biology; biometry and biostatistics; biophysics; botany; cell biology; entomology and parasitology; genetics; microbiology; neuroscience (biological); nutrition; physiology; zoology; other biological, n.e.c.

Environmental biology: ecosystem sciences; evolutionary biology; limnology; physiological ecology; population and biotic community ecology; population biology; systematics; other environmental biology, n.e.c.

Agricultural: agronomy; animal sciences; food science and technology; fish and wildlife; forestry; horticulture; phytopathology; phytoproduction; plant sciences; soils and soil science; general agriculture; other agriculture, n.e.c.

Medical: dentistry; internal medicine; neurology; obstetrics and gynecology; ophthalmology; otolaryngology; pathology; pediatrics; pharmacology; pharmacy; preventive medicine; psy-

chiatry; radiology; surgery; veterinary medicine; other medical, n.e.c.

Life sciences, n.e.c.

- b. **Psychology** deals with behavior, mental processes, and individual and group characteristics and abilities. Psychology in this survey is divided into three categories: biological aspects; social aspects; and psychological sciences, n.e.c. Examples of the disciplines under each of these fields are as follows:

Biological aspects: animal behavior; clinical psychology; comparative psychology; ethology; experimental psychology

Social aspects: development and personality; educational, personnel, and vocational psychology and testing; industrial and engineering psychology; social psychology

Psychological sciences, n.e.c.

- c. **Physical sciences** are concerned with understanding of the material universe and its phenomena. They comprise the fields of astronomy; chemistry; physics; and physical sciences, n.e.c. Examples of disciplines under each of these fields are as follows:

Astronomy: laboratory astrophysics; optical astronomy; radio astronomy; theoretical astrophysics; X-ray, gamma-ray, and neutrino astronomy

Chemistry: inorganic; organic; organometallic; physical

Physics: acoustics; atomic and molecular; condensed matter; elementary particle; nuclear structure; optics; plasma

Physical sciences, n.e.c.

- d. **Environmental sciences** (terrestrial and extraterrestrial) are, with one exception,

concerned with the gross nonbiological properties of the areas of the solar system that directly or indirectly affect human survival and welfare. The one exception is that obligations for studies pertaining to life in the sea or other bodies of water are reported as support of oceanography and not biology. Environmental sciences comprise the fields of atmospheric sciences; geological sciences; oceanography; and environmental sciences, n.e.c. Examples of disciplines under each of these fields are as follows:

Atmospheric sciences: aeronomy; extraterrestrial atmospheres; meteorology; solar; weather modification

Geological sciences: engineering geophysics; general geology; geodesy and gravity; geomagnetism; hydrology; inorganic geochemistry; isotopic geochemistry; laboratory geophysics; organic geochemistry; paleomagnetism; paleontology; physical geography and cartography; seismology; soil sciences

Oceanography: biological oceanography; chemical oceanography; marine geophysics; physical oceanography

Environmental sciences, n.e.c.

- e. **Mathematics and computer sciences** employ logical reasoning with the aid of symbols and are concerned with the development of methods of operation employing such symbols and, in the case of computer sciences, with the application of such methods to automated information systems. Examples of disciplines under these fields are as follows:

Mathematics: algebra; analysis; applied mathematics; foundations and logic; geometry; numerical analysis; statistics; topology

Computer sciences: computer and information sciences (general); design, development, and application of computer capabilities to data storage and

manipulation; information sciences and systems; programming languages; systems analysis

Mathematics and computer sciences, n.e.c.

- f. **Engineering** is concerned with studies directed toward developing engineering principles or toward making specific principles usable in engineering practice. Engineering in this survey is divided into eight fields: aeronautical; astronautical; chemical; civil; electrical; mechanical; metallurgy and materials; and engineering, n.e.c. Examples of disciplines under each of these fields are as follows:

Aeronautical: aerodynamics

Astronautical: aerospace; space technology

Chemical: petroleum; petroleum refining; process

Civil: architectural; hydraulic; hydrologic; marine; sanitary and environmental; structural; transportation

Electrical: communication; electronic; power

Mechanical: engineering mechanics

Metallurgy and materials: ceramic; mining; textile; welding

Engineering, n.e.c.: agricultural; bioengineering; biomedical; industrial and management; nuclear; ocean; systems

- g. **Social sciences** are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. Social sciences include anthropology; economics; political science; sociology; and social sciences, n.e.c. Examples of disciplines under the fields of social science are as follows:

Anthropology: applied anthropology; archaeology; cultural and personality; social and ethnology

Economics: economic systems and development; econometrics and economic statistics; history of economic thought; industrial, labor, and agricultural economics; international economics; macroeconomics; microeconomics; public finance and fiscal policy; theory

Political science: area or regional studies; comparative government; history of political ideas; international relations and law; national political and legal systems; political theory; public administration

Sociology: comparative and historical; complex organizations; culture and social structure; demography; group interactions; social problems and social welfare; sociological theory

Social sciences, n.e.c.: linguistics; research in education; research in history; research in law (e.g., attempts to assess impact on society of legal systems and practices); socioeconomic geography

- h. **Other sciences, n.e.c.:** This category is used for multidisciplinary or inter-disciplinary projects that cannot be classified within one of the broad fields of science already listed.
- 6. A **performer** is either an intramural group or organization carrying out an operational function or an extramural organization or person receiving support or providing services under a contract or grant.
 - a. **Intramural performers** are the agencies of the Federal Government. Their work is carried on directly by agency personnel. Obligations reported under this category are for activities performed or to be performed by the reporting agency itself or represent funds that the agency transfers to another Federal agency for performance of work **as long as the ultimate performer is that agency or any Federal agency.** If the ultimate performer is not a Federal agency, the

funds so transferred are reported by the transferring agency under the appropriate extramural performer category (universities and colleges, other nonprofit institutions, or industrial firms).

NOTE: Intramural activities cover not only the actual intramural R&D performance, but also the costs associated with the planning and administration of both intramural and extramural programs by Federal personnel. Intramural activities also include the costs of supplies and equipment, essentially of an “off-the-shelf” nature, that are procured for use in intramural R&D. For example, the purchase from an extramural source of an operational launch vehicle (i.e., one that has gone beyond the development or prototype stage) that is used for intra-mural performance of R&D is reported as a part of the cost of intramural R&D.

- b. **Extramural performers** are organizations outside the Federal sector that perform R&D with Federal funds under contract, grant, or cooperative agreement. Only those costs associated with actual R&D performance are reported, but these costs would include costs of materials and supplies to carry out R&D activities. Note, however, that the costs of off-the-shelf supplies and equipment required to support intramural R&D and procured from extramural suppliers are considered as part of the costs of intramural performance and not as part of the costs of extramural performance.

Extramural performers are identified as follows:

- i. **Industrial firms:** Organizations that may legally distribute net earnings to individuals or to other organizations.
- ii. **Universities and colleges:** Institutions engaged primarily in providing resident and/or accredited instruction for at least a 1-year program above the secondary school level. Included are colleges of lib-

eral arts; schools of arts and sciences; professional schools, as in engineering and medicine, including affiliated hospitals and associated research institutes; and agricultural experiment stations.

iii. **Other nonprofit institutions:** Private organizations other than educational institutions whose net earnings in no part inure to the benefit of a private stockholder or individual and other private organizations organized for the exclusive purpose of turning over their entire net earnings to such nonprofit organizations.

iv. **Federally funded research and development centers (FFRDCs):** R&D-performing organizations that are exclusively or substantially financed by the Federal Government and are supported by the Federal Government either to meet a particular R&D objective or, in some instances, to provide major facilities at universities for research and associated training purposes. Each center is administered either by an industrial firm, a university, or another nonprofit institution.

In general, all of the following criteria are met by an organization that is included in the FFRDC category:

- (1) Its primary activities include one or more of the following: basic research, applied research, development, or management of research and development (specifically excluded are organizations engaged primarily in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination);
- (2) It is a separate operational unit within the parent organization or is organized as a separately incorporated organization;

- (3) It performs actual research and development or R&D management either upon direct request by the Federal Government or under a broad charter from the Federal Government but in either case under the direct monitorship of the Federal Government;
- (4) It receives its major financial support (70 percent or more) from the Federal Government, usually from one agency;
- (5) It has, or is expected to have, a long-term relationship with its sponsoring agency (about 5 years or more), as evidenced by specific obligations assumed by it and the agency;
- (6) Most or all of its facilities are owned by, or are funded under contract with, the Federal Government; and
- (7) It has an average annual budget (operating and capital equipment) of at least \$500,000.

v. **State and local governments:** State and local government agencies, excluding State or local universities and colleges, agricultural experiment stations, medical schools, and affiliated hospitals. (Federal R&D funds obligated directly to such State and local institutions excluded in this category are included under the “Universities and colleges” category in this report.) R&D activities under the State and local category are performed either by the State or local agencies themselves or by other organizations under grants or contracts from such agencies. Regardless of the ultimate performer, Federal R&D funds directed to State and local governments are reported under this sector and no other.

vi. **Foreign performers:** Foreign citizens, foreign organizations, or foreign governments, as well as inter-

national organizations (such as the North Atlantic Treaty Organization (NATO), United Nations Educational, Scientific, and Cultural Organization (UNESCO), and World Health Organization (WHO)), performing R&D work abroad financed by the Federal Government. Excluded are U.S. agencies, organizations, or citizens performing R&D abroad for the Federal Government; the survey does not seek information on “offshore” payments. An exception is made in the case of U.S. citizens performing R&D abroad under special foreign currency funds; these activities are included under “Foreign performers.” Foreign scientists performing in the United States are excluded, however.

- vii. **Private individuals:** For cases wherein an R&D grant or contract is awarded directly to a private individual, obligations incurred are placed under “Industrial firms.”

- 7. **Federal obligations for research performed at universities and colleges, by detailed field of science:** Only six agencies participate in the portion of the survey covering the funding of research at universities and colleges by detailed field of science. These six agencies represent approximately 97 percent of the Federal research obligations to universities and colleges. The six agencies are the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration (NASA); and the National Science Foundation (NSF).

- 8. **Geographic distribution of 1997 R&D obligations**

- a. Only the 10 largest R&D funding agencies participate in the portion of the survey covering the geographic distribution of obligations for research and development and R&D plant. These 10 agencies accounted for approximately 98 percent of total Federal R&D and R&D plant obligations in

1997. The respondents are the Departments of Agriculture, Commerce, Energy, Defense, Health and Human Services, the Interior, and Transportation; the Environmental Protection Agency; NASA; and NSF.

- b. Actual fiscal year 1997 data were requested in terms of the principal location (State or outlying area) where the work was performed by the primary contractor, grantee, or intramural organization. When this information was not available in their records, the respondents were asked to assign the obligations to the State, outlying area, or office abroad where the headquarters of the U.S. primary contractor, grantee, or intramural organization was located.
- c. Obligations were reported for R&D as a combined amount.
- d. Specifically omitted from the geographic portion of the survey were R&D obligations to foreign performers and support of foreign performers. Foreign performer data, by country, are reported in a separate section of the Federal funds survey.

CHANGES IN REPORTING

While completing the survey forms each year, agency respondents make revisions to their estimates for the latest 2 years of the previous report, in this case fiscal years 1997 and 1998. Such revision is part of the budgetary cycle. From time to time survey submissions also reflect reappraisals and revisions in classification of various aspects of agencies’ R&D programs. When such revisions occur, NSF requires the agencies to provide revised prior-year data to maintain consistency and comparability with the most recent concepts.

CHANGES IN THE SCOPE OF THE SURVEY

The scope of the Federal funds survey has changed over time, and the survey instrument has been revised accordingly. The most recent changes are described in the following paragraphs.

Since the Volume 40 (FYs 1990–92) survey cycle, the Department of Defense (DoD) has reported research

obligations separate from the development obligations for Table A, *Obligations for research and development, by State and performer*. (Tables A1, *Obligations for research, by State and performer*, and A2, *Obligations for development, by State and performer*, were created for DoD to complete in place of Table A.) The additional detail provided by DoD highlights the following circumstances that are specific to DoD:

- DoD funds the preponderance of Federal development.
- DoD development funded at institutions of higher education is typically performed at university-affiliated non-academic laboratories that are separate from the universities' academic departments where university research is typically performed.
- Geographic distribution of development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform most of the research and development.

During the Volume 44 (FYs 1994–96) survey cycle, the Director for Defense Research and Engineering (DDR&E) at DoD requested that NSF further clarify the true character of DoD's R&D program, particularly as it compares with other Federal agencies, by adding more detail to development obligations reported by DoD respondents. Specifically, DoD requested that NSF allow DoD agencies to report development obligations in two separate categories, advanced technology development and major systems development.

The reasoning behind DDR&E's request for the additional development categories is best explained by the following excerpt from a letter written by Robert V. Tuohy, Chief, Program Analysis and Integration at DDR&E, to John E. Jankowski, Jr., Program Director, Research and Development Statistics Program, SRS:

The DoD's R&D program is divided into two major pieces, Science and Technology (S&T) and Major Systems Development. The other Federal agencies' entire R&D programs are equivalent in nature to DoD's S&T program, with the exception of the Department of Energy and possibly NASA. Comparing those other agency programs to DoD's program, including the development of weapons systems such as F-22 Fighter and the New Attack Submarine, is misleading.

At several annual issues workshops held during FYs 1992–96, NSF learned from survey respondents that there were certain Federal funds survey data items for which reliable data were difficult to obtain and report. As a result, NSF began to consider removing certain items from the Federal funds survey instrument. The Volume 42 Detailed Statistical Tables publication was distributed with a flier notifying data users that NSF was considering eliminating several items from future volumes of the document. Data users were asked to review the list of affected tables shown on the flier, and to comment on the proposed eliminations to NSF.

Prior to the publication of the Volume 43 (FYs 1993–95) edition of the Detailed Statistical Tables, NSF decided to remove 54 tables from the document that depicted data on two of the items slated for elimination: data for the special foreign currency program, and detailed field of S&E data for estimated outyears. NSF continued to collect data from Federal agencies for these items through Volume 45, but eliminated the special foreign currency program and outyears' detailed field of S&E lines on the survey instrument beginning with the Volume 46 (FYs 1996–98) survey cycle. A special flier was included in the Volume 46 mailout packet that listed the data items that were no longer required.

NSF also decided to remove two tables depicting data on foreign performers by region, country, and agency prior to publication of the Volume 43 edition of the Detailed Statistical Tables. These tables have been reinstated since Volume 46.

LIMITATIONS OF THE DATA

Funds for research and development were reported on a 3-year basis comparable with the 1999 budget, upon which the data were based. The amounts reported for each year, as already stated, are the obligations or outlays incurred in that year, regardless of when funds were authorized or received by an agency and regardless of whether the funds were identified in the agency's budget specifically for research, development, R&D plant, or some combination of the three.

The respondents reconciled the data reported to the Federal funds survey with the amounts for R&D they reported to the Office of Management and Budget for the 1999 President's budget.

Some agencies are not able to report the full costs of research and development. For example, the headquarters costs of planning and administering R&D programs of the Department of Defense (DoD) (estimated at a fraction of 1 percent of the agency's R&D total) are excluded, because this agency has stated that identification of the amounts is impracticable.

R&D plant data are also underreported to some extent because of the difficulty encountered by some agencies, particularly DoD and NASA, in identifying and reporting these data. DoD's respondents report

obligations for the R&D plant funded under the agency's construction appropriation, but they are able to identify only a small portion of the R&D plant support that is within R&D contracts funded from DoD's appropriation for research, development, testing, and evaluation. Similarly, NASA respondents cannot separately identify the portions of industrial R&D contracts that apply to R&D plant; R&D plant data are subsumed in the R&D data covering industrial performance. NASA R&D plant data for other performing sectors are reported separately.

SECTION B.

FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS, BY AGENCY AND TYPE OF ADMINISTRATION

The following is the master list of federally funded research and development centers (FFRDCs) included in the Federal funds survey for fiscal years 1997–99. The list is

arranged by sponsoring agency and administering organization. Respondents reported under the FFRDC category those funds obligated to centers identified on this list.

Federally funded research and development centers, by agency and type of administration			
Sponsoring agency	Administered by universities and colleges ¹	Administered by other nonprofit institutions ²	Administered by industrial firms
DEPARTMENT OF DEFENSE: Office of the Secretary of Defense		Institute for Defense Analyses Studies and Analyses FFRDC (Institute for Defense Analyses), Alexandria, VA Logistics Management Institute (Logistics Management Institute), McLean, VA ³ National Defense Research Institute (RAND Corp. ⁴), Santa Monica, CA C3I Federally Funded Research and Development Center (MITRE Corp. ⁵), Bedford, MA, and McLean, VA	
	Software Engineering Institute (Carnegie Mellon University), Pittsburgh, PA		
National Security Agency		Institute for Defense Analyses Communications and Computing Federally Funded Research and Development Center ⁷ (Institute for Defense Analyses), Alexandria, VA	
Department of the Navy		Center for Naval Analyses (The CNA Corp.), Alexandria, VA	
Department of the Air Force	Lincoln Laboratory (Massachusetts Institute of Technology), Lexington, MA	Aerospace Federally Funded Research and Development Center (The Aerospace Corp.), El Segundo, CA Project Air Force (RAND Corp. ⁴), Santa Monica, CA	
Department of the Army ⁶		Arroyo Center (RAND Corp. ⁴), Santa Monica, CA	
DEPARTMENT OF ENERGY ⁸	Ames Laboratory (Iowa State University of Science and Technology), Ames, IA Argonne National Laboratory (University of Chicago), Argonne, IL Brookhaven National Laboratory (Associated Universities, Inc.), Upton, Long Island, NY Ernest Orlando Lawrence Berkeley National Laboratory (University of California), Berkeley, CA	National Renewable Energy Laboratory ⁹ (Midwest Research Institute), Golden, CO Pacific Northwest National Laboratory (Battelle Memorial Institute), Richland, WA	Idaho National Engineering Laboratory (Lockheed Martin Idaho Technologies Company), Idaho Falls, ID Oak Ridge National Laboratory (Lockheed Martin Energy Research Corp.), Oak Ridge, TN Sandia National Laboratories (Sandia Corp., a subsidiary of Lockheed Martin Corp.), Albuquerque, NM Savannah River Technology Center (Westinghouse Savannah River Co.), Aiken, SC

See explanatory information, if any, and SOURCE at end of table.

Federally funded research and development centers, by agency and type of administration—Continued

Sponsoring agency	Administered by universities and colleges ¹	Administered by other nonprofit institutions ²	Administered by industrial firms
DEPARTMENT OF ENERGY, continued	<p>Fermi National Accelerator Laboratory (Universities Research Association, Inc.), Batavia, IL</p> <p>Lawrence Livermore National Laboratory (University of California), Livermore, CA</p> <p>Los Alamos National Laboratory (University of California), Los Alamos, NM</p> <p>Oak Ridge Institute for Science and Education (Oak Ridge Associated Universities, Inc.), Oak Ridge, TN</p> <p>Princeton Plasma Physics Laboratory (Princeton University), Princeton, NJ</p> <p>Stanford Linear Accelerator Center (Leland Stanford Junior University), Stanford, CA</p> <p>Thomas Jefferson National Accelerator Facility (Southeastern Universities Research Association, Inc.), Newport News, VA ¹⁰</p>		
DEPARTMENT OF HEALTH AND HUMAN SERVICES: National Institutes of Health			<p>NCI Frederick Cancer Research and Development Center (Science Applications International Corp.; Advanced BioScience Laboratories, Inc.; Charles River Laboratories, Inc.; Data Management Services, Inc.), Frederick, MD</p>
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	<p>Jet Propulsion Laboratory (California Institute of Technology), Pasadena, CA</p>		
NATIONAL SCIENCE FOUNDATION	<p>National Astronomy and Ionosphere Center (Cornell University), Arecibo, PR</p> <p>National Center for Atmospheric Research (University Corp. for Atmospheric Research), Boulder, CO</p> <p>National Optical Astronomy Observatories¹¹ (Association of Universities for Research in Astronomy, Inc.), Tucson, AZ</p> <p>National Radio Astronomy Observatory (Associated Universities, Inc.), Green Bank, WV</p>	<p>Critical Technologies Institute (RAND Corp.⁴), Washington, DC</p>	

See explanatory information, if any, and SOURCE at end of table.

Federally funded research and development centers, by agency and type of administration—Continued			
Sponsoring agency	Administered by universities and colleges ¹	Administered by other nonprofit institutions ²	Administered by industrial firms
NUCLEAR REGULATORY COMMISSION		Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute), San Antonio, TX	
DEPARTMENT OF TRANSPORTATION: Federal Aviation Administration		Center for Advanced Aviation System Development (MITRE Corp. ⁵), McLean, VA	
DEPARTMENT OF THE TREASURY: Internal Revenue Service		Tax Systems Modernization Institute (IIT Research Institute), Lanham, MD	

¹Includes university consortia

²That is, other than universities and colleges

³Logistics Management Institute moved from Bethesda, MD, to McLean, VA, in May 1994.

⁴The following portions of the RAND Corp. are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), Project Air Force, the Arroyo Center, and the Critical Technologies Institute. All other agency support to RAND is reported under "other nonprofit institutions excluding FFRDCs."

⁵Only the C3I Federally Funded Research and Development Center and the Center for Advanced Aviation System Development parts of the MITRE Corp. are FFRDCs. All other agency support to MITRE is reported under "other nonprofit institutions excluding FFRDCs."

⁶The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX, as an FFRDC in November 1993.

⁷Although the Institute for Defense Analyses Communications and Computing FFRDC has been in existence since 1956, the Department of Defense added it to the Master Government List of FFRDCs for the first time in October 1995.

⁸The Department of Energy decertified Bettis Atomic Power Laboratory, Hanford Engineering Development Laboratory, and Knolls Atomic Power Laboratory as FFRDCs in October/November 1992. The Department of Energy removed from the Master Government List of FFRDCs (1) the Energy Technology Engineering Center in November 1995 and (2) the Inhalation Toxicology Research Institute in May 1996.

⁹In September 1991 the name was changed from Solar Energy Research Institute.

¹⁰In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

¹¹Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory, and the National Solar Observatory (formerly Sacramento Peak Observatory).

SOURCE: National Science Foundation/SRS

Updates of this list and an Annotated List of FFRDCs are available at <http://www.nsf.gov/sbe/srs/ffrdc/start.htm>.

SECTION C.

DETAILED STATISTICAL TABLES

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TABLE NOTES

- Because of rounding, detail may not add to totals.
- Dashes or asterisks appearing in lieu of figures indicate that the amounts are less than 50 thousand dollars or less than 0.5 percent.
- The abbreviation “FFRDCs” appearing in statistical tables refers to federally funded research and development centers.
- In tables showing extramural performers, obligations of the U.S. Department of Agriculture to agricultural experiment stations are included within obligations to universities and colleges.
- Defense agencies within the Department of Defense include the Ballistic Missile Defense Organization, the Defense Advanced Research Projects Agency, the Defense Information Systems Agency, the Defense Logistics Agency, the Defense Special Weapons Agency, the Joint Staff, the National Imagery and Mapping Agency, the Special Operations Command, and the Washington Headquarters Services.
- In January 1996 the Bureau of Mines was abolished, and some of its activities were transferred to the Bureau of Land Management, the Geological Survey, and the Department of Energy.
- Data for only those agencies that had obligations in the variables represented by a particular table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in a particular table, refer to appendix B.
- National Science Foundation has made improvements to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data. These changes will be reflected in future data releases.

**Table C-1. Federal obligations for research and development, by character of work, and R&D plant:
fiscal years 1951-99**

[Dollars in thousands]

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Fiscal Years	Total	Total research and development	Research		Development	R&D Plant
			Basic	Applied		
1951	1,851,571	1,521,527	NA	NA	NA	330,044
1952	2,216,848	1,909,665	120,945	NA	NA	307,183
1953	2,167,456	1,919,543	115,997	NA	NA	247,913
1954	1,918,046	1,761,840	116,033	NA	NA	156,206
1955	2,251,894	2,044,593	130,068	NA	NA	207,301
1956	3,266,903	2,988,203	206,441	645,506	2,136,256	278,700
1957	4,389,237	3,932,001	262,348	662,199	3,007,454	457,236
1958	4,906,015	4,569,722	334,543	744,264	3,490,915	336,293
1959	7,122,610	6,693,510	465,981	874,272	5,353,257	429,100
1960	8,080,015	7,551,746	590,374	1,282,135	5,679,237	528,269
1961	9,607,023	9,058,623	814,513	1,663,431	6,580,679	548,400
1962	11,069,059	10,289,947	986,314	2,018,481	7,285,152	779,112
1963	13,662,879	12,494,611	1,151,753	2,356,150	8,986,708	1,168,268
1964	15,323,870	14,225,354	1,303,000	2,571,452	10,350,902	1,098,516
1965	15,745,852	14,614,249	1,435,469	2,811,761	10,367,019	1,131,603
1966	16,178,640	15,320,334	1,579,181	3,081,066	10,660,087	858,306
1967	17,149,186	16,529,099	1,845,847	2,785,543	11,897,709	620,087
1968	16,525,038	15,921,208	1,840,562	2,940,500	11,140,146	603,830
1969	16,309,900	15,640,888	1,944,773	2,700,117	10,995,998	669,012
1970	15,863,385	15,338,937	1,925,908	2,974,890	10,438,139	524,448
1971	16,153,756	15,542,512	1,980,141	3,143,030	10,419,341	611,244
1972	17,097,951	16,495,895	2,186,937	3,360,759	10,948,199	602,056
1973	17,574,486	16,800,153	2,232,006	3,349,423	11,218,724	774,333
1974	18,176,457	17,410,128	2,387,681	3,787,559	11,234,888	766,329
1975	19,859,548	19,038,818	2,588,427	4,141,281	12,309,110	820,730
1976	21,616,382	20,779,658	2,767,454	4,851,878	13,160,326	836,724
1977	24,817,577	23,450,377	3,258,640	5,255,475	14,936,262	1,367,200
1978	27,140,849	25,845,137	3,698,604	5,908,154	16,238,379	1,295,712
1979	29,620,597	28,145,142	4,192,665	6,342,340	17,610,137	1,475,455
1980	31,386,095	29,830,432	4,674,156	6,923,222	18,233,054	1,555,663
1981	34,589,634	33,103,924	5,041,295	7,171,485	20,891,144	1,485,710
1982	37,822,363	36,432,589	5,481,605	7,540,580	23,410,404	1,389,774
1983	40,009,032	38,711,537	6,260,131	7,993,394	24,458,012	1,297,495
1984	44,012,149	42,224,865	7,067,359	7,911,414	27,246,092	1,787,284
1985	50,180,369	48,359,565	7,818,682	8,314,739	32,226,144	1,820,804
1986	52,951,181	51,412,364	8,153,076	8,349,123	34,910,165	1,538,817
1987	57,099,656	55,253,693	8,942,425	8,998,096	37,313,172	1,845,963
1988	58,826,512	56,769,425	9,473,618	9,176,527	38,119,280	2,057,087
1989	63,571,605	61,406,484	10,602,011	10,163,520	40,640,953	2,165,121
1990	65,831,189	63,559,471	11,285,593	10,336,771	41,937,107	2,271,718
1991	64,147,951	61,295,152	12,170,794	11,797,583	37,326,775	2,852,799
1992	68,577,184	65,592,590	12,489,864	12,000,734	41,101,992	2,984,594
1993	70,414,697	67,314,025	13,399,121	13,491,376	40,423,528	3,100,672
1994	69,450,776	67,235,390	13,523,476	13,887,733	39,824,181	2,215,386
1995	70,442,935	68,186,798	13,877,031	14,557,365	39,752,402	2,256,137
1996	69,401,163	67,655,046	14,464,035	13,795,729	39,395,282	1,746,117
1997	71,744,603	69,829,852	14,942,151	14,423,436	40,464,265	1,914,751
1998 (Preliminary)	74,202,880	72,114,081	15,861,534	15,608,973	40,643,574	2,088,799
1999 (Preliminary)	75,330,488	73,333,215	16,913,798	16,078,598	40,340,819	1,997,273

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-2. Summary of Federal funds for research and development and for R&D plant:
fiscal years 1997, 1998, and 1999**

[In millions of dollars and percentages]

Page 1 of 2

Item	1997	Preliminary			
		1998	Percentage change 1997-98	1999	Percentage change 1998-99
Total outlays for research and development and for R&D plant	\$70,892.0	\$71,780.3	1.3	\$73,150.4	1.9
Research and development	68,897.2	69,849.2	1.4	71,111.5	1.8
R&D plant	1,994.8	1,931.1	-3.2	2,038.9	5.6
Total obligations for research and development and for R&D plant	71,744.6	74,202.9	3.4	75,330.5	1.5
Research and development, total	69,829.9	72,114.1	3.3	73,333.2	1.7
By performers:					
Intramural ¹	16,720.0	17,097.6	2.3	17,463.3	2.1
Industrial firms	31,418.0	32,313.4	2.9	31,830.5	-1.5
FFRDCs administered by industrial firms	1,128.2	1,226.6	8.7	1,326.3	8.1
Universities and colleges	12,561.1	13,273.2	5.7	14,170.5	6.8
FFRDCs administered by universities and colleges	3,701.0	3,570.6	-3.5	3,894.4	9.1
Other nonprofit institutions	2,962.1	3,256.9	10.0	3,245.0	-.4
FFRDCs administered by nonprofit institutions	821.0	817.2	-.5	841.5	3.0
State and local governments	261.1	310.3	18.9	328.1	5.7
Foreign	257.5	248.1	-3.6	233.6	-5.9
Research, total	29,365.6	31,470.5	7.2	32,992.4	4.8
By performers:					
Intramural ¹	7,667.2	8,250.6	7.6	8,610.9	4.4
Industrial firms	4,392.1	5,004.4	13.9	4,785.8	-4.4
FFRDCs administered by industrial firms	759.6	803.7	5.8	849.6	5.7
Universities and colleges	11,173.2	11,815.1	5.7	12,721.2	7.7
FFRDCs administered by universities and colleges	2,598.9	2,665.3	2.6	2,955.0	10.9
Other nonprofit institutions	2,294.9	2,426.2	5.7	2,559.9	5.5
FFRDCs administered by nonprofit institutions	217.5	217.4	-.1	207.5	-4.6
State and local governments	144.0	168.8	17.3	184.3	9.2
Foreign	118.1	119.0	.7	118.3	-.6
By fields of science:					
Life sciences	12,661.3	13,620.8	7.6	14,386.4	5.6
Psychology	545.4	578.0	6.0	612.4	6.0
Physical sciences	4,148.7	4,335.0	4.5	4,577.9	5.6
Environmental sciences	3,045.7	3,287.6	7.9	3,261.0	-.8
Mathematics and computer sciences	1,671.8	1,830.9	9.5	2,254.9	23.2
Engineering	5,690.3	6,090.0	7.0	6,023.0	-1.1
Social sciences	696.3	823.7	18.3	883.0	7.2
Other sciences, n.e.c.	906.1	904.4	-.2	993.8	9.9
Basic research, total	14,942.2	15,861.5	6.2	16,913.8	6.6
By performers:					
Intramural ¹	2,688.6	2,872.2	6.8	3,063.7	6.7
Industrial firms	1,166.7	1,373.9	17.8	1,279.1	-6.9
FFRDCs administered by industrial firms	294.7	324.0	9.9	335.6	3.6
Universities and colleges	7,695.8	8,067.0	4.8	8,763.0	8.6
FFRDCs administered by universities and colleges	1,600.0	1,584.5	-1.0	1,754.9	10.8
Other nonprofit institutions	1,289.6	1,400.6	8.6	1,476.2	5.4
FFRDCs administered by nonprofit institutions	88.4	113.2	28.1	105.3	-6.9
State and local governments	68.4	72.7	6.3	80.6	10.7
Foreign	49.9	53.4	7.0	55.5	3.8
By fields of science:					
Life sciences	7,203.8	7,687.6	6.7	8,322.2	8.3
Psychology	293.9	303.9	3.4	332.3	9.3
Physical sciences	2,976.4	3,126.6	5.0	3,304.9	5.7
Environmental sciences	1,543.5	1,640.9	6.3	1,675.5	2.1
Mathematics and computer sciences	661.4	699.8	5.8	786.7	12.4
Engineering	1,583.0	1,696.4	7.2	1,712.8	1.0
Social sciences	221.0	238.5	7.9	265.8	11.4
Other sciences, n.e.c.	459.3	467.8	1.8	513.7	9.8

See explanatory information, if any, and SOURCE at end of table.

**Table C-2. Summary of Federal funds for research and development and for R&D plant:
fiscal years 1997, 1998, and 1999**

[In millions of dollars and percentages]

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Item	1997	Preliminary			
		1998	Percentage change 1997-98	1999	Percentage change 1998-99
Applied research, total	\$14,423.4	\$15,609.0	8.2	\$16,078.6	3.0
By performers:					
Intramural ¹	4,978.7	5,378.4	8.0	5,547.2	3.1
Industrial firms	3,225.5	3,630.5	12.6	3,506.7	-3.4
FFRDCs administered by industrial firms	464.9	479.8	3.2	514.0	7.1
Universities and colleges	3,477.4	3,748.1	7.8	3,958.1	5.6
FFRDCs administered by universities and colleges	998.8	1,080.8	8.2	1,200.1	11.0
Other nonprofit institutions	1,005.3	1,025.6	2.0	1,083.7	5.7
FFRDCs administered by nonprofit institutions	129.2	104.2	-19.3	102.2	-2.0
State and local governments	75.5	96.1	27.2	103.8	8.0
Foreign	68.2	65.5	-4.0	62.8	-4.1
By fields of science:					
Life sciences	5,457.6	5,933.2	8.7	6,064.2	2.2
Psychology	251.5	274.1	9.0	280.1	2.2
Physical sciences	1,172.4	1,208.4	3.1	1,273.0	5.3
Environmental sciences	1,502.2	1,646.7	9.6	1,585.5	-3.7
Mathematics and computer sciences	1,010.5	1,131.1	11.9	1,468.3	29.8
Engineering	4,107.3	4,393.6	7.0	4,310.2	-1.9
Social sciences	475.3	585.2	23.1	617.2	5.5
Other sciences, n.e.c.	446.8	436.6	-2.3	480.2	10.0
Development, total	40,464.3	40,643.6	.4	40,340.8	-.7
By performers:					
Intramural ¹	9,052.7	8,847.1	-2.3	8,852.3	.1
Industrial firms	27,025.8	27,309.0	1.0	27,044.7	-1.0
FFRDCs administered by industrial firms	368.6	422.9	14.7	476.7	12.7
Universities and colleges	1,387.9	1,458.1	5.1	1,449.4	-.6
FFRDCs administered by universities and colleges	1,102.1	905.3	-17.9	939.4	3.8
Other nonprofit institutions	667.2	830.7	24.5	685.1	-17.5
FFRDCs administered by nonprofit institutions	603.4	599.8	-.6	634.1	5.7
State and local governments	117.1	141.5	20.8	143.8	1.6
Foreign	139.3	129.2	-7.3	115.3	-10.7
R&D plant, total	1,914.8	2,088.8	9.1	1,997.3	-4.4
By performers supported:					
Intramural	608.3	819.8	34.8	582.3	-29.0
Industrial firms	389.8	381.5	-2.1	369.8	-3.1
FFRDCs administered by industrial firms	60.5	36.6	-39.5	196.8	437.5
Universities and colleges	238.6	180.1	-24.5	173.1	-3.9
FFRDCs administered by universities and colleges	548.8	634.8	15.7	643.4	1.4
Other nonprofit institutions	16.7	16.4	-2.1	15.8	-3.8
FFRDCs administered by nonprofit institutions	52.0	19.5	-62.5	15.9	-18.3
Foreign .....	.1	.1	2.9	.1	-3.7

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals. Percentages are computed using dollars in thousands.

KEY: FFRDCs = Federally funded research and development centers
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-3. Federal funds for research and development and for R&D plant, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

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Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
Total, all agencies	71,744.6	74,202.9	75,330.5	70,892.0	71,780.3	73,150.4
Departments:						
Department of Agriculture, total	1,572.8	1,549.1	1,529.0	1,464.4	1,563.1	1,573.1
Agricultural Marketing Service	4.8	4.7	4.8	4.5	4.7	4.8
Agricultural Research Service	806.6	822.7	851.9	770.4	821.2	855.2
Animal & Plant Health Inspection Service	19.8	19.5	19.0	19.8	19.5	19.0
Cooperative State Rsch, Ed, & Extension Svc	496.7	429.6	395.7	435.8	447.3	437.6
Economic Research Service	53.0	71.6	55.8	42.4	69.5	54.7
Food Safety Inspection Service	-	-	-	-	-	-
Foreign Agricultural Service	1.4	1.4	1.4	1.4	1.4	1.4
Forest Service	181.8	190.7	190.7	181.8	190.7	190.7
Grain Inspection Packers & Stockyards Admin	2.8	2.8	2.8	2.8	2.8	2.8
National Agricultural Statistics Service	3.4	3.5	3.4	3.0	3.4	3.5
Rural Business-Cooperative Service	2.5	2.5	3.4	2.5	2.5	3.4
Department of Commerce, total	1,046.5	1,109.1	1,105.7	1,037.6	1,050.4	1,050.8
Bureau of the Census	5.1	5.5	9.1	5.1	5.5	9.1
Economic Development Administration .....	.6	.6	.6	.6	.6	.6
National Institute of Standards & Technology	482.1	506.8	540.7	473.3	448.1	485.8
National Oceanic & Atmospheric Administration	530.9	570.1	529.6	530.9	570.1	529.6
Nat'l Telecommunications & Information Admin	27.8	26.2	25.8	27.8	26.2	25.8
Department of Defense, total	34,873.8	34,927.5	34,426.5	35,699.0	34,396.2	33,604.5
Department of the Army, total	4,825.2	5,156.6	4,838.3	4,889.9	5,003.9	4,939.5
Department of the Army, Civil Functions ¹	30.9	38.9	45.5	30.9	38.9	45.5
Department of the Army, Military Functions	4,794.3	5,117.6	4,792.8	4,859.0	4,965.0	4,894.0
Department of the Navy	8,252.5	8,107.4	8,307.7	8,417.1	7,843.0	8,195.5
Department of the Air Force	13,990.6	13,900.3	13,678.2	14,912.1	14,159.6	12,929.7
Defense Agencies, total	7,509.1	7,500.9	7,326.0	7,182.6	7,111.4	7,262.1
Ballistic Missile Defense Organization	3,244.4	3,231.8	3,182.8	3,243.1	3,229.1	3,171.2
Defense Advanced Research Projects Agency	2,037.4	2,022.6	2,036.7	2,037.4	2,022.6	2,036.7
Defense Information Systems Agency	57.5	53.7	115.1	42.5	48.1	76.9
Defense Logistics Agency	45.3	110.5	63.3	34.1	46.5	45.0
Defense Special Weapons Agency	226.5	235.5	265.5	202.4	242.3	261.0
Joint Staff	38.5	54.0	69.5	38.5	54.0	69.5
Special Operations Command	135.1	154.8	152.4	208.0	151.4	162.8
Washington Headquarters Services	1,724.3	1,638.0	1,440.7	1,376.5	1,317.6	1,439.0
Operational Test & Evaluation, Director	26.6	27.8	25.3	21.5	27.8	26.6
Test & Evaluation, Deputy Under Sec of Defense	269.7	234.6	251.0	275.8	250.4	251.1
Department of Education	181.2	211.8	262.7	169.1	189.6	228.5
Department of Energy	6,332.8	6,592.4	7,477.6	6,485.3	6,766.6	7,349.0
Department of Health & Human Services, total	13,048.0	14,134.5	15,074.8	11,457.7	13,116.4	14,134.8
Administration on Aging	4.4	10.4	10.4	4.0	10.0	10.0
Administration for Children & Families	17.4	20.1	32.9	12.7	15.3	19.7
Agency for Health Care Policy & Research	144.0	146.5	171.4	110.0	93.0	94.0
Centers for Disease Control & Prevention	323.0	358.5	365.2	306.0	336.0	362.0
Food & Drug Administration	173.1	180.4	174.5	165.9	188.0	188.6
Health Care Financing Administration	43.6	50.0	50.0	66.3	46.4	50.6
Health Resources & Services Administration	13.8	14.2	14.4	13.8	14.2	14.4
National Institutes of Health	12,237.9	13,261.6	14,163.0	10,687.0	12,328.1	13,305.4
Office of the Secretary, total	21.7	16.8	16.9	22.9	9.3	14.1
Office of the Asst Sec, Planning & Evaluation	18.4	14.0	14.0	21.0	8.0	13.0
Office of Public Health & Science	3.3	2.8	2.9	1.9	1.3	1.1
Substance Abuse & Mental Health Svcs Admin	69.1	76.0	76.0	69.1	76.0	76.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-3. Federal funds for research and development and for R&D plant, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

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Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
Department of Housing & Urban Development	33.5	39.6	50.5	31.7	40.4	41.4
Department of the Interior, total	587.1	615.4	640.0	572.6	640.5	639.1
Bureau of Reclamation	7.1	9.0	10.2	6.8	8.8	10.2
Geological Survey	531.2	546.5	567.4	517.2	572.8	567.3
Minerals Management Service	22.8	26.4	28.5	22.6	25.3	27.6
National Park Service	26.0	33.5	34.0	26.0	33.5	34.0
Department of Justice, total	84.7	102.9	97.9	75.5	76.1	73.3
Bureau of Prisons	4.6	6.0	6.2	4.6	6.0	6.2
Drug Enforcement Administration ²	-	-	-	-	-	-
Federal Bureau of Investigation	35.5	35.7	35.8	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.4	.4	.4	.4	.4	.4
Office of Justice Programs	44.2	60.7	55.5	35.0	33.9	30.9
Department of Labor, total	35.1	46.8	69.4	38.5	52.3	51.8
Bureau of Labor Statistics	12.6	12.4	12.4	12.6	12.4	12.4
Employment & Training Administration	14.1	27.1	49.4	18.2	33.3	32.6
Occupational Safety & Health Administration	5.5	4.5	4.6	5.4	4.5	4.6
Office of the Secretary .....	.2	.2	.2	.2	.1	.1
Pension Benefit Guaranty Corporation .....	.7	.7	.7	.0	.0	.0
Pension & Welfare Benefits Administration	2.0	2.0	2.1	2.0	2.0	2.1
Department of State	1.0	1.0	1.0	.6	.6	.6
Department of Transportation, total	545.9	683.4	792.8	548.4	562.3	836.5
Coast Guard	23.3	22.8	19.5	23.3	22.8	19.5
Federal Aviation Administration	226.3	221.5	304.3	236.0	234.0	287.3
Federal Highway Administration	211.2	344.2	369.9	218.0	218.4	440.2
Federal Railroad Administration	19.5	20.8	20.8	18.1	28.4	30.5
Federal Transit Administration	17.0	16.5	16.2	19.5	18.6	11.5
National Highway Traffic Safety Admin	36.4	42.4	51.4	23.0	27.0	35.0
Office of the Secretary	3.5	4.1	3.5	2.0	3.0	4.0
Research & Special Programs Administration	8.7	11.1	7.2	8.4	10.2	8.5
Department of the Treasury, total	59.8	74.4	75.4	59.8	74.2	75.6
Bureau of Engraving & Printing	1.7	1.9	1.9	1.7	1.9	1.9
Internal Revenue Service	50.8	61.7	62.9	50.8	61.7	62.9
Office of Thrift Supervision .....	.6	.7	.8	.6	.7	.8
United States Customs Service ⁴	6.3	8.9	8.9	6.3	8.9	8.9
United States Mint	-	.5	.2	-	.3	.3
United States Secret Service .....	.4	.6	.8	.4	.6	.8
Department of Veterans Affairs	284.0	300.5	301.2	243.2	277.0	300.8
Other agencies:						
Appalachian Regional Commission .....	.9	.9	.9	.9	.9	.9
Consumer Product Safety Commission .....	.1	.2	.2	.1	.2	.2
Environmental Protection Agency	517.2	637.0	631.0	537.0	596.0	616.0
Federal Communications Commission	3.1	3.5	3.3	3.1	3.5	3.3
Federal Trade Commission .....	.7	1.3	1.1	.7	1.3	1.1
General Services Administration	-	-	-	1.6	.1	.8
International Development Cooperation						
Agency, total	206.4	183.9	184.2	206.4	183.9	184.2
Agency for International Development ⁵	206.4	183.9	184.2	206.4	183.9	184.2
Library of Congress	2.8	2.5	2.7	2.5	2.5	2.6
National Aeronautics & Space Administration	9,649.2	10,162.7	9,502.0	9,715.0	9,605.0	9,576.0
National Archives & Records Administration .....	.1	.1	.1	.1	.1	.1
National Science Foundation	2,452.3	2,567.5	2,857.0	2,318.0	2,331.0	2,571.0
Nuclear Regulatory Commission	62.1	50.7	52.8	67.5	53.5	52.3
Smithsonian Institution	134.0	138.5	146.5	126.0	131.0	138.0
Social Security Administration	13.6	56.1	37.2	13.6	56.1	37.2
Tennessee Valley Authority ⁶	8.9	2.9	.0	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-3. Federal funds for research and development and for R&D plant, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

Page 3 of 3

Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
United States Arms Control & Disarmament Agency	1.2	0.8	0.8	1.2	0.8	0.8
United States Information Agency .....	.2	.2	.0	.2	.2	.0
United States International Trade Commission	5.7	5.8	6.1	5.7	5.8	6.1

- ¹ The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- ² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-4. Federal funds for total research and development, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

Page 1 of 3

Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
Total, all agencies	69,829.9	72,114.1	73,333.2	68,897.2	69,849.2	71,111.5
Departments:						
Department of Agriculture, total	1,388.6	1,441.9	1,425.6	1,342.2	1,399.8	1,420.5
Agricultural Marketing Service	4.8	4.7	4.8	4.5	4.7	4.8
Agricultural Research Service	687.6	719.1	751.2	699.5	715.7	744.9
Animal & Plant Health Inspection Service	19.8	19.5	19.0	19.8	19.5	19.0
Cooperative State Rsch, Ed, & Extension Svc	433.5	428.8	395.7	386.5	392.2	398.0
Economic Research Service	53.0	71.6	55.8	42.4	69.5	54.7
Food Safety Inspection Service	-	-	-	-	-	-
Foreign Agricultural Service	1.4	1.4	1.4	1.4	1.4	1.4
Forest Service	179.8	188.0	188.0	179.8	188.0	188.0
Grain Inspection Packers & Stockyards Admin	2.8	2.8	2.8	2.8	2.8	2.8
National Agricultural Statistics Service	3.4	3.5	3.4	3.0	3.4	3.5
Rural Business-Cooperative Service	2.5	2.5	3.4	2.5	2.5	3.4
Department of Commerce, total	1,003.1	978.7	1,035.5	967.1	992.8	1,000.6
Bureau of the Census	5.1	5.5	9.1	5.1	5.5	9.1
Economic Development Administration .....	.6	.6	.6	.6	.6	.6
National Institute of Standards & Technology	460.4	403.3	483.9	424.4	417.4	449.0
National Oceanic & Atmospheric Administration	509.3	543.2	516.2	509.3	543.2	516.2
Nat'l Telecommunications & Information Admin	27.8	26.2	25.8	27.8	26.2	25.8
Department of Defense, total	34,788.3	34,832.5	34,350.4	35,646.6	34,345.8	33,553.7
Department of the Army, total	4,821.1	5,152.5	4,834.1	4,885.2	4,999.6	4,935.3
Department of the Army, Civil Functions ¹	30.9	38.9	45.5	30.9	38.9	45.5
Department of the Army, Military Functions	4,790.2	5,113.6	4,788.6	4,854.2	4,960.7	4,889.8
Department of the Navy	8,215.5	8,065.7	8,287.2	8,400.2	7,818.2	8,164.2
Department of the Air Force	13,951.5	13,851.3	13,627.4	14,886.7	14,138.7	12,914.9
Defense Agencies, total	7,503.8	7,500.6	7,325.5	7,177.3	7,111.0	7,261.5
Ballistic Missile Defense Organization	3,239.3	3,231.5	3,182.4	3,238.0	3,228.8	3,170.7
Defense Advanced Research Projects Agency	2,037.4	2,022.6	2,036.7	2,037.4	2,022.6	2,036.7
Defense Information Systems Agency	57.5	53.7	115.1	42.5	48.1	76.9
Defense Logistics Agency	45.2	110.4	63.1	34.0	46.4	44.9
Defense Special Weapons Agency	226.5	235.5	265.5	202.4	242.3	261.0
Joint Staff	38.5	54.0	69.5	38.5	54.0	69.5
Special Operations Command	135.1	154.8	152.4	208.0	151.4	162.8
Washington Headquarters Services	1,724.3	1,638.0	1,440.7	1,376.5	1,317.6	1,439.0
Operational Test & Evaluation, Director	26.6	27.8	25.3	21.5	27.8	26.6
Test & Evaluation, Deputy Under Sec of Defense	269.7	234.6	251.0	275.8	250.4	251.1
Department of Education	181.2	211.8	262.7	169.1	184.6	228.5
Department of Energy	5,603.5	5,833.1	6,540.8	5,678.6	5,938.8	6,460.5
Department of Health & Human Services, total	12,787.9	13,717.8	14,821.0	11,337.2	12,902.4	13,846.6
Administration on Aging	4.4	10.4	10.4	4.0	10.0	10.0
Administration for Children & Families	17.4	20.1	32.9	12.7	15.3	19.7
Agency for Health Care Policy & Research	144.0	146.5	171.4	110.0	93.0	94.0
Centers for Disease Control & Prevention	323.0	358.5	365.2	306.0	336.0	362.0
Food & Drug Administration	158.6	159.1	169.4	157.3	158.6	168.6
Health Care Financing Administration	43.6	50.0	50.0	66.3	46.4	50.6
Health Resources & Services Administration	13.1	13.5	13.7	13.1	13.5	13.7
National Institutes of Health	11,993.0	12,866.9	13,915.0	10,575.9	12,144.2	13,037.8
Office of the Secretary, total	21.7	16.8	16.9	22.9	9.3	14.1
Office of the Asst Sec, Planning & Evaluation	18.4	14.0	14.0	21.0	8.0	13.0
Office of Public Health & Science	3.3	2.8	2.9	1.9	1.3	1.1
Substance Abuse & Mental Health Svcs Admin	69.1	76.0	76.0	69.1	76.0	76.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-4. Federal funds for total research and development, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

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Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
Department of Housing & Urban Development	33.5	39.6	50.5	31.7	40.4	41.4
Department of the Interior, total	579.9	613.3	637.9	566.1	638.0	636.8
Bureau of Reclamation	7.1	9.0	10.2	6.8	8.8	10.2
Geological Survey	526.3	545.3	566.2	512.5	571.6	566.2
Minerals Management Service	20.6	25.4	27.5	20.8	24.1	26.5
National Park Service	26.0	33.5	34.0	26.0	33.5	34.0
Department of Justice, total	84.7	102.9	97.9	75.5	76.1	73.3
Bureau of Prisons	4.6	6.0	6.2	4.6	6.0	6.2
Drug Enforcement Administration ²	-	-	-	-	-	-
Federal Bureau of Investigation	35.5	35.7	35.8	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.4	.4	.4	.4	.4	.4
Office of Justice Programs	44.2	60.7	55.5	35.0	33.9	30.9
Department of Labor, total	35.1	46.8	69.4	38.5	52.3	51.8
Bureau of Labor Statistics	12.6	12.4	12.4	12.6	12.4	12.4
Employment & Training Administration	14.1	27.1	49.4	18.2	33.3	32.6
Occupational Safety & Health Administration	5.5	4.5	4.6	5.4	4.5	4.6
Office of the Secretary .....	.2	.2	.2	.2	.1	.1
Pension Benefit Guaranty Corporation .....	.7	.7	.7	.0	.0	.0
Pension & Welfare Benefits Administration	2.0	2.0	2.1	2.0	2.0	2.1
Department of State	1.0	1.0	1.0	.6	.6	.6
Department of Transportation, total	526.9	664.7	767.9	527.6	544.8	816.7
Coast Guard	22.9	22.5	19.3	22.9	22.5	19.3
Federal Aviation Administration	209.1	207.2	290.0	218.0	219.0	273.0
Federal Highway Administration	210.3	340.9	360.2	215.6	217.1	435.5
Federal Railroad Administration	18.9	20.0	20.1	18.1	27.5	29.9
Federal Transit Administration	17.0	16.5	16.2	19.5	18.6	11.5
National Highway Traffic Safety Admin	36.4	42.4	51.4	23.0	27.0	35.0
Office of the Secretary	3.5	4.1	3.5	2.0	3.0	4.0
Research & Special Programs Administration	8.7	11.1	7.2	8.4	10.2	8.5
Department of the Treasury, total	59.7	74.2	75.3	59.7	74.0	75.4
Bureau of Engraving & Printing	1.7	1.9	1.9	1.7	1.9	1.9
Internal Revenue Service	50.8	61.7	62.9	50.8	61.7	62.9
Office of Thrift Supervision .....	.6	.7	.8	.6	.7	.8
United States Customs Service ⁴	6.1	8.8	8.8	6.1	8.8	8.8
United States Mint	-	.5	.2	-	.3	.3
United States Secret Service .....	.4	.6	.8	.4	.6	.8
Department of Veterans Affairs	252.7	299.3	300.0	234.9	269.2	292.3
Other agencies:						
Appalachian Regional Commission .....	.9	.9	.9	.9	.9	.9
Consumer Product Safety Commission .....	.1	.2	.2	.1	.2	.2
Environmental Protection Agency	492.2	606.0	610.0	515.0	569.0	596.0
Federal Communications Commission	3.1	3.5	3.3	3.1	3.5	3.3
Federal Trade Commission .....	.7	1.3	1.1	.7	1.3	1.1
International Development Cooperation						
Agency, total	206.4	183.9	184.2	206.4	183.9	184.2
Agency for International Development ⁵	206.4	183.9	184.2	206.4	183.9	184.2
Library of Congress	2.8	2.5	2.7	2.5	2.5	2.6
National Aeronautics & Space Administration	9,327.3	9,850.7	9,201.1	9,273.0	9,295.0	9,250.0
National Archives & Records Administration .....	.1	.1	.1	.1	.1	.1
National Science Foundation	2,248.5	2,356.9	2,654.8	2,000.0	2,087.0	2,344.0
Nuclear Regulatory Commission	62.1	50.7	52.8	67.5	53.5	52.3
Smithsonian Institution	130.0	134.0	142.0	123.0	127.0	134.0
Social Security Administration	13.6	56.1	37.2	13.6	56.1	37.2
Tennessee Valley Authority ⁶	8.9	2.9	.0	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-4. Federal funds for total research and development, by agency:
fiscal years 1997, 1998, and 1999**

[Dollars in millions]

Page 3 of 3

Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
United States Arms Control & Disarmament Agency	1.2	0.8	0.8	1.2	0.8	0.8
United States Information Agency .....	.2	.2	.0	.2	.2	.0
United States International Trade Commission	5.7	5.8	6.1	5.7	5.8	6.1

- ¹ The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- ² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-5. Federal obligations for total research and development, by agency
and character of work: fiscal year 1997**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	69,829,852	14,942,151	14,423,436	40,464,265	NA	NA
Departments:						
Department of Agriculture, total	1,388,619	590,097	700,009	98,513	NA	NA
Agricultural Marketing Service	4,786	0	4,171	615	NA	NA
Agricultural Research Service	687,627	364,442	261,298	61,887	NA	NA
Animal & Plant Health Inspection Service	19,849	0	0	19,849	NA	NA
Cooperative State Rsch, Ed, & Extension Svc	433,525	189,895	243,630	0	NA	NA
Economic Research Service	53,003	5,300	47,703	0	NA	NA
Food Safety Inspection Service	15	0	0	15	NA	NA
Foreign Agricultural Service	1,422	915	507	0	NA	NA
Forest Service	179,800	28,435	137,420	13,945	NA	NA
Grain Inspection Packers & Stockyards Admin	2,752	0	550	2,202	NA	NA
National Agricultural Statistics Service	3,372	1,110	2,262	0	NA	NA
Rural Business-Cooperative Service	2,468	0	2,468	0	NA	NA
Department of Commerce, total	1,003,118	39,235	768,823	195,060	NA	NA
Bureau of the Census	5,120	1,061	2,352	1,707	NA	NA
Economic Development Administration	550	0	550	0	NA	NA
National Institute of Standards & Technology	460,391	38,174	293,277	128,940	NA	NA
National Oceanic & Atmospheric Administration	509,263	0	468,803	40,460	NA	NA
Nat'l Telecommunications & Information Admin	27,794	0	3,841	23,953	NA	NA
Department of Defense, total	34,788,263	1,022,870	2,786,947	30,978,446	NA	NA
Department of the Army, total	4,821,099	178,345	531,682	4,111,072	NA	NA
Department of the Army, Civil Functions ¹	30,941	4,028	14,537	12,376	NA	NA
Department of the Army, Military Functions	4,790,158	174,317	517,145	4,098,696	569,127	3,529,569
Department of the Navy	8,215,492	347,214	538,520	7,329,758	526,655	6,803,103
Department of the Air Force	13,951,546	188,067	628,519	13,134,960	456,931	12,678,029
Defense Agencies, total	7,503,802	309,244	1,088,226	6,106,332	2,683,498	3,422,834
Ballistic Missile Defense Organization	3,239,319	12,131	92,614	3,134,574	842,185	2,292,389
Defense Advanced Research Projects Agency	2,037,405	73,950	700,874	1,262,581	1,180,538	82,043
Defense Information Systems Agency	57,476	0	1,871	55,605	0	55,605
Defense Logistics Agency	45,176	0	7,041	38,135	30,321	7,814
Defense Special Weapons Agency	226,507	0	199,624	26,883	26,883	0
Joint Staff	38,520	0	0	38,520	38,520	0
Special Operations Command	135,079	0	16,138	118,941	49,955	68,986
Washington Headquarters Services	1,724,320	223,163	70,064	1,431,093	515,096	915,997
Operational Test & Evaluation, Director	26,610	0	0	26,610	0	26,610
Test & Evaluation, Deputy Under Sec of Defense	269,714	0	0	269,714	0	269,714
Department of Education	181,248	3,044	135,033	43,171	NA	NA
Department of Energy	5,603,506	1,970,861	1,596,836	2,035,809	NA	NA
Department of Health & Human Services, total	12,787,919	6,851,762	4,376,290	1,559,867	NA	NA
Administration on Aging	4,426	0	175	4,251	NA	NA
Administration for Children & Families	17,380	0	17,380	0	NA	NA
Agency for Health Care Policy & Research	143,973	0	134,067	9,906	NA	NA
Centers for Disease Control & Prevention	322,990	0	322,990	0	NA	NA
Food & Drug Administration	158,601	0	158,601	0	NA	NA
Health Care Financing Administration	43,601	0	43,601	0	NA	NA
Health Resources & Services Administration	13,136	1,053	12,083	0	NA	NA
National Institutes of Health	11,993,007	6,850,709	3,668,966	1,473,332	NA	NA
Office of the Secretary, total	21,723	0	18,427	3,296	NA	NA
Office of the Asst Sec, Planning & Evaluation	18,427	0	18,427	0	NA	NA
Office of Public Health & Science	3,296	0	0	3,296	NA	NA
Substance Abuse & Mental Health Svcs Admin	69,082	0	0	69,082	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table C-5. Federal obligations for total research and development, by agency and character of work: fiscal year 1997

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Department of Housing & Urban Development	33,457	0	11,265	22,192	NA	NA
Department of the Interior, total	579,901	56,442	496,213	27,246	NA	NA
Bureau of Reclamation	7,093	0	5,393	1,700	NA	NA
Geological Survey	526,265	55,942	444,777	25,546	NA	NA
Minerals Management Service	20,592	0	20,592	0	NA	NA
National Park Service	25,951	500	25,451	0	NA	NA
Department of Justice, total	84,743	12,400	20,085	52,258	NA	NA
Bureau of Prisons	4,645	0	1,900	2,745	NA	NA
Drug Enforcement Administration ²	31	0	1	30	NA	NA
Federal Bureau of Investigation	35,458	0	0	35,458	NA	NA
Immigration & Naturalization Service ³	400	0	400	0	NA	NA
Office of Justice Programs	44,209	12,400	17,784	14,025	NA	NA
Department of Labor, total	35,085	11,300	10,447	13,338	NA	NA
Bureau of Labor Statistics	12,600	11,300	1,300	0	NA	NA
Employment & Training Administration	14,119	0	1,503	12,616	NA	NA
Occupational Safety & Health Administration	5,461	0	5,461	0	NA	NA
Office of the Secretary	230	0	109	121	NA	NA
Pension Benefit Guaranty Corporation	655	0	54	601	NA	NA
Pension & Welfare Benefits Administration	2,020	0	2,020	0	NA	NA
Department of State	976	0	976	0	NA	NA
Department of Transportation, total	526,872	37,540	343,665	145,667	NA	NA
Coast Guard	22,932	0	5,733	17,199	NA	NA
Federal Aviation Administration	209,120	0	159,443	49,677	NA	NA
Federal Highway Administration	210,312	37,540	111,630	61,142	NA	NA
Federal Railroad Administration	18,885	0	18,235	650	NA	NA
Federal Transit Administration	17,011	0	5,954	11,057	NA	NA
National Highway Traffic Safety Admin	36,397	0	36,397	0	NA	NA
Office of the Secretary	3,526	0	0	3,526	NA	NA
Research & Special Programs Administration	8,689	0	6,273	2,416	NA	NA
Department of the Treasury, total	59,686	31	50,830	8,825	NA	NA
Bureau of Engraving & Printing	1,704	31	1,574	99	NA	NA
Internal Revenue Service	50,831	0	47,864	2,967	NA	NA
Office of Thrift Supervision	638	0	638	0	NA	NA
United States Customs Service ⁴	6,130	0	380	5,750	NA	NA
United States Mint	9	0	0	9	NA	NA
United States Secret Service	374	0	374	0	NA	NA
Department of Veterans Affairs	252,699	13,575	217,406	21,718	NA	NA
Other agencies:						
Appalachian Regional Commission	900	0	900	0	NA	NA
Consumer Product Safety Commission	78	0	78	0	NA	NA
Environmental Protection Agency	492,200	51,133	357,976	83,091	NA	NA
Federal Communications Commission	3,099	0	3,099	0	NA	NA
Federal Trade Commission	696	0	696	0	NA	NA
International Development Cooperation						
Agency, total	206,410	122	176,542	29,746	NA	NA
Agency for International Development ⁵	206,410	122	176,542	29,746	NA	NA
Library of Congress	2,772	259	537	1,976	NA	NA
National Aeronautics & Space Administration	9,327,300	2,094,767	2,090,120	5,142,413	NA	NA
National Archives & Records Administration	120	0	120	0	NA	NA
National Science Foundation	2,248,520	2,056,713	191,807	0	NA	NA
Nuclear Regulatory Commission	62,102	0	62,102	0	NA	NA
Smithsonian Institution	130,000	130,000	0	0	NA	NA
Social Security Administration	13,618	0	13,618	0	NA	NA
Tennessee Valley Authority ⁶	8,916	0	3,987	4,929	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-5. Federal obligations for total research and development, by agency
and character of work: fiscal year 1997**

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
United States Arms Control & Disarmament Agency	1,200	0	1,200	0	NA	NA
United States Information Agency	152	0	152	0	NA	NA
United States International Trade Commission	5,677	0	5,677	0	NA	NA

- ¹ The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- ² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: NA = Not applicable (data are not collected in this category for this agency)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1998

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	72,114,081	15,861,534	15,608,973	40,643,574	NA	NA
Departments:						
Department of Agriculture, total	1,441,937	598,033	741,318	102,586	NA	NA
Agricultural Marketing Service	4,696	0	4,098	598	NA	NA
Agricultural Research Service	719,126	373,946	280,459	64,721	NA	NA
Animal & Plant Health Inspection Service	19,538	0	0	19,538	NA	NA
Cooperative State Rsch, Ed, & Extension Svc	428,787	185,297	243,490	0	NA	NA
Economic Research Service	71,604	7,160	64,444	0	NA	NA
Food Safety Inspection Service	15	0	0	15	NA	NA
Foreign Agricultural Service	1,422	915	507	0	NA	NA
Forest Service	188,000	29,570	142,918	15,512	NA	NA
Grain Inspection Packers & Stockyards Admin	2,752	0	550	2,202	NA	NA
National Agricultural Statistics Service	3,481	1,145	2,336	0	NA	NA
Rural Business-Cooperative Service	2,516	0	2,516	0	NA	NA
Department of Commerce, total	978,668	40,766	784,870	153,032	NA	NA
Bureau of the Census	5,482	1,131	2,509	1,842	NA	NA
Economic Development Administration	550	0	550	0	NA	NA
National Institute of Standards & Technology	403,267	39,635	265,500	98,132	NA	NA
National Oceanic & Atmospheric Administration	543,176	0	512,647	30,529	NA	NA
Nat'l Telecommunications & Information Admin	26,193	0	3,664	22,529	NA	NA
Department of Defense, total	34,832,518	1,015,727	2,863,941	30,952,850	NA	NA
Department of the Army, total	5,152,498	177,783	677,954	4,296,761	NA	NA
Department of the Army, Civil Functions ¹	38,931	4,861	18,498	15,572	NA	NA
Department of the Army, Military Functions	5,113,567	172,922	659,456	4,281,189	802,722	3,478,467
Department of the Navy	8,065,743	321,518	509,654	7,234,571	526,212	6,708,359
Department of the Air Force	13,851,320	183,887	554,550	13,112,883	423,081	12,689,802
Defense Agencies, total	7,500,568	332,539	1,121,783	6,046,246	2,872,793	3,173,453
Ballistic Missile Defense Organization	3,231,530	46,936	100,944	3,083,650	996,666	2,086,984
Defense Advanced Research Projects Agency	2,022,563	77,379	770,722	1,174,462	1,087,071	87,391
Defense Information Systems Agency	53,725	0	1,630	52,095	0	52,095
Defense Logistics Agency	110,418	0	8,016	102,402	93,988	8,414
Defense Special Weapons Agency	235,484	0	170,178	65,306	65,306	0
Joint Staff	53,976	0	0	53,976	53,976	0
Special Operations Command	154,825	0	19,947	134,878	56,649	78,229
Washington Headquarters Services	1,638,047	208,224	50,346	1,379,477	519,137	860,340
Operational Test & Evaluation, Director	27,823	0	0	27,823	0	27,823
Test & Evaluation, Deputy Under Sec of Defense	234,566	0	0	234,566	0	234,566
Department of Education	211,821	5,305	149,907	56,609	NA	NA
Department of Energy	5,833,137	2,077,394	1,671,041	2,084,702	NA	NA
Department of Health & Human Services, total	13,717,762	7,360,998	4,690,843	1,665,921	NA	NA
Administration on Aging	10,426	0	2,385	8,041	NA	NA
Administration for Children & Families	20,083	0	20,083	0	NA	NA
Agency for Health Care Policy & Research	146,510	0	136,859	9,651	NA	NA
Centers for Disease Control & Prevention	358,457	0	358,457	0	NA	NA
Food & Drug Administration	159,090	0	159,090	0	NA	NA
Health Care Financing Administration	50,000	0	50,000	0	NA	NA
Health Resources & Services Administration	13,534	1,087	12,447	0	NA	NA
National Institutes of Health	12,866,889	7,359,911	3,937,522	1,569,456	NA	NA
Office of the Secretary, total	16,783	0	14,000	2,783	NA	NA
Office of the Asst Sec, Planning & Evaluation	14,000	0	14,000	0	NA	NA
Office of Public Health & Science	2,783	0	0	2,783	NA	NA
Substance Abuse & Mental Health Svcs Admin	75,990	0	0	75,990	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1998

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Department of Housing & Urban Development	39,611	0	14,122	25,489	NA	NA
Department of the Interior, total	613,262	57,098	526,121	30,043	NA	NA
Bureau of Reclamation	8,964	0	6,755	2,209	NA	NA
Geological Survey	545,344	56,552	460,958	27,834	NA	NA
Minerals Management Service	25,430	0	25,430	0	NA	NA
National Park Service	33,524	546	32,978	0	NA	NA
Department of Justice, total	102,861	18,567	26,270	58,024	NA	NA
Bureau of Prisons	6,030	0	3,213	2,817	NA	NA
Drug Enforcement Administration ²	8	0	0	8	NA	NA
Federal Bureau of Investigation	35,729	0	0	35,729	NA	NA
Immigration & Naturalization Service ³	400	0	400	0	NA	NA
Office of Justice Programs	60,694	18,567	22,657	19,470	NA	NA
Department of Labor, total	46,842	11,100	9,535	26,207	NA	NA
Bureau of Labor Statistics	12,400	11,100	1,300	0	NA	NA
Employment & Training Administration	27,074	0	1,565	25,509	NA	NA
Occupational Safety & Health Administration	4,495	0	4,495	0	NA	NA
Office of the Secretary	200	0	100	100	NA	NA
Pension Benefit Guaranty Corporation	653	0	55	598	NA	NA
Pension & Welfare Benefits Administration	2,020	0	2,020	0	NA	NA
Department of State	976	0	976	0	NA	NA
Department of Transportation, total	664,724	59,076	417,601	188,047	NA	NA
Coast Guard	22,503	0	5,626	16,877	NA	NA
Federal Aviation Administration	207,218	0	150,774	56,444	NA	NA
Federal Highway Administration	340,908	59,076	185,228	96,604	NA	NA
Federal Railroad Administration	19,985	0	19,335	650	NA	NA
Federal Transit Administration	16,503	0	6,246	10,257	NA	NA
National Highway Traffic Safety Admin	42,439	0	42,439	0	NA	NA
Office of the Secretary	4,100	0	0	4,100	NA	NA
Research & Special Programs Administration	11,068	0	7,953	3,115	NA	NA
Department of the Treasury, total	74,249	23	62,649	11,577	NA	NA
Bureau of Engraving & Printing	1,896	23	1,784	89	NA	NA
Internal Revenue Service	61,749	0	58,948	2,801	NA	NA
Office of Thrift Supervision	720	0	720	0	NA	NA
United States Customs Service ⁴	8,775	0	600	8,175	NA	NA
United States Mint	512	0	0	512	NA	NA
United States Secret Service	597	0	597	0	NA	NA
Department of Veterans Affairs	299,288	14,100	262,509	22,679	NA	NA
Other agencies:						
Appalachian Regional Commission	900	0	900	0	NA	NA
Consumer Product Safety Commission	206	0	206	0	NA	NA
Environmental Protection Agency	606,000	57,000	450,000	99,000	NA	NA
Federal Communications Commission	3,462	0	3,462	0	NA	NA
Federal Trade Commission	1,287	0	1,287	0	NA	NA
International Development Cooperation						
Agency, total	183,921	1,296	141,405	41,220	NA	NA
Agency for International Development ⁵	183,921	1,296	141,405	41,220	NA	NA
Library of Congress	2,539	209	462	1,868	NA	NA
National Aeronautics & Space Administration	9,850,700	2,245,625	2,483,595	5,121,480	NA	NA
National Archives & Records Administration	120	0	120	0	NA	NA
National Science Foundation	2,356,929	2,165,217	191,712	0	NA	NA
Nuclear Regulatory Commission	50,677	0	50,677	0	NA	NA
Smithsonian Institution	134,000	134,000	0	0	NA	NA
Social Security Administration	56,053	0	56,053	0	NA	NA
Tennessee Valley Authority ⁶	2,876	0	636	2,240	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1998

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
United States Arms Control & Disarmament Agency	810	0	810	0	NA	NA
United States Information Agency	150	0	150	0	NA	NA
United States International Trade Commission	5,795	0	5,795	0	NA	NA

- ¹ The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- ² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: NA = Not applicable (data are not collected in this category for this agency)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	73,333,215	16,913,798	16,078,598	40,340,819	NA	NA
Departments:						
Department of Agriculture, total	1,425,628	608,797	711,838	104,993	NA	NA
Agricultural Marketing Service	4,791	0	4,176	615	NA	NA
Agricultural Research Service	751,218	390,633	292,975	67,610	NA	NA
Animal & Plant Health Inspection Service	18,986	0	0	18,986	NA	NA
Cooperative State Rsch, Ed, & Extension Svc	395,689	180,960	214,729	0	NA	NA
Economic Research Service	55,839	5,584	50,255	0	NA	NA
Food Safety Inspection Service	15	0	0	15	NA	NA
Foreign Agricultural Service	1,422	915	507	0	NA	NA
Forest Service	188,000	29,570	142,918	15,512	NA	NA
Grain Inspection Packers & Stockyards Admin	2,819	0	564	2,255	NA	NA
National Agricultural Statistics Service	3,449	1,135	2,314	0	NA	NA
Rural Business-Cooperative Service	3,400	0	3,400	0	NA	NA
Department of Commerce, total	1,035,540	42,832	806,713	185,995	NA	NA
Bureau of the Census	9,149	1,889	4,183	3,077	NA	NA
Economic Development Administration	550	0	550	0	NA	NA
National Institute of Standards & Technology	483,936	40,943	307,694	135,299	NA	NA
National Oceanic & Atmospheric Administration	516,153	0	490,534	25,619	NA	NA
Nat'l Telecommunications & Information Admin	25,752	0	3,752	22,000	NA	NA
Department of Defense, total	34,350,403	1,106,440	2,982,459	30,261,504	NA	NA
Department of the Army, total	4,834,097	204,069	541,422	4,088,606	NA	NA
Department of the Army, Civil Functions ¹	45,524	4,315	22,999	18,210	NA	NA
Department of the Army, Military Functions	4,788,573	199,754	518,423	4,070,396	492,291	3,578,105
Department of the Navy	8,287,163	361,224	522,841	7,403,098	464,128	6,938,970
Department of the Air Force	13,627,368	202,913	580,744	12,843,711	419,536	12,424,175
Defense Agencies, total	7,325,463	338,234	1,337,452	5,649,777	2,534,536	3,115,241
Ballistic Missile Defense Organization	3,182,354	29,843	84,646	3,067,865	941,898	2,125,967
Defense Advanced Research Projects Agency	2,036,729	63,849	970,083	1,002,797	911,803	90,994
Defense Information Systems Agency	115,149	0	1,910	113,239	0	113,239
Defense Logistics Agency	63,149	0	8,248	54,901	50,019	4,882
Defense Special Weapons Agency	265,485	0	213,063	52,422	52,422	0
Joint Staff	69,495	0	0	69,495	69,495	0
Special Operations Command	152,392	0	18,287	134,105	56,324	77,781
Washington Headquarters Services	1,440,710	244,542	41,215	1,154,953	452,575	702,378
Operational Test & Evaluation, Director	25,300	0	0	25,300	0	25,300
Test & Evaluation, Deputy Under Sec of Defense	251,012	0	0	251,012	0	251,012
Department of Education	262,680	8,204	194,776	59,700	NA	NA
Department of Energy	6,540,813	2,226,637	1,901,637	2,412,539	NA	NA
Department of Health & Human Services, total	14,820,975	7,977,128	5,004,632	1,839,215	NA	NA
Administration on Aging	10,426	0	1,085	9,341	NA	NA
Administration for Children & Families	32,928	0	32,928	0	NA	NA
Agency for Health Care Policy & Research	171,435	0	159,665	11,770	NA	NA
Centers for Disease Control & Prevention	365,246	0	365,246	0	NA	NA
Food & Drug Administration	169,396	0	169,396	0	NA	NA
Health Care Financing Administration	50,000	0	50,000	0	NA	NA
Health Resources & Services Administration	13,675	1,150	12,525	0	NA	NA
National Institutes of Health	13,915,002	7,975,978	4,199,787	1,739,237	NA	NA
Office of the Secretary, total	16,877	0	14,000	2,877	NA	NA
Office of the Asst Sec, Planning & Evaluation	14,000	0	14,000	0	NA	NA
Office of Public Health & Science	2,877	0	0	2,877	NA	NA
Substance Abuse & Mental Health Svcs Admin	75,990	0	0	75,990	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
Department of Housing & Urban Development	50,510	0	18,198	32,312	NA	NA
Department of the Interior, total	637,862	66,227	542,152	29,483	NA	NA
Bureau of Reclamation	10,200	0	7,650	2,550	NA	NA
Geological Survey	566,214	65,681	473,600	26,933	NA	NA
Minerals Management Service	27,459	0	27,459	0	NA	NA
National Park Service	33,989	546	33,443	0	NA	NA
Department of Justice, total	97,861	25,950	21,861	50,050	NA	NA
Bureau of Prisons	6,196	0	3,300	2,896	NA	NA
Drug Enforcement Administration ²	8	0	0	8	NA	NA
Federal Bureau of Investigation	35,776	0	0	35,776	NA	NA
Immigration & Naturalization Service ³	400	0	400	0	NA	NA
Office of Justice Programs	55,481	25,950	18,161	11,370	NA	NA
Department of Labor, total	69,373	11,100	10,104	48,169	NA	NA
Bureau of Labor Statistics	12,400	11,100	1,300	0	NA	NA
Employment & Training Administration	49,376	0	1,954	47,422	NA	NA
Occupational Safety & Health Administration	4,615	0	4,615	0	NA	NA
Office of the Secretary	200	0	100	100	NA	NA
Pension Benefit Guaranty Corporation	704	0	57	647	NA	NA
Pension & Welfare Benefits Administration	2,078	0	2,078	0	NA	NA
Department of State	976	0	976	0	NA	NA
Department of Transportation, total	767,888	55,788	439,529	272,571	NA	NA
Coast Guard	19,263	0	4,816	14,447	NA	NA
Federal Aviation Administration	290,000	0	156,305	133,695	NA	NA
Federal Highway Administration	360,183	55,788	194,632	109,763	NA	NA
Federal Railroad Administration	20,127	0	19,477	650	NA	NA
Federal Transit Administration	16,160	0	8,370	7,790	NA	NA
National Highway Traffic Safety Admin	51,449	0	51,449	0	NA	NA
Office of the Secretary	3,540	0	0	3,540	NA	NA
Research & Special Programs Administration	7,166	0	4,480	2,686	NA	NA
Department of the Treasury, total	75,321	24	63,897	11,400	NA	NA
Bureau of Engraving & Printing	1,878	24	1,760	94	NA	NA
Internal Revenue Service	62,924	0	59,993	2,931	NA	NA
Office of Thrift Supervision	788	0	788	0	NA	NA
United States Customs Service ⁴	8,775	0	600	8,175	NA	NA
United States Mint	200	0	0	200	NA	NA
United States Secret Service	756	0	756	0	NA	NA
Department of Veterans Affairs	299,989	15,500	259,672	24,817	NA	NA
Other agencies:						
Appalachian Regional Commission	900	0	900	0	NA	NA
Consumer Product Safety Commission	236	0	236	0	NA	NA
Environmental Protection Agency	610,000	57,000	453,000	100,000	NA	NA
Federal Communications Commission	3,270	0	3,270	0	NA	NA
Federal Trade Commission	1,131	0	1,131	0	NA	NA
International Development Cooperation						
Agency, total	184,243	1,050	134,699	48,494	NA	NA
Agency for International Development ⁵	184,243	1,050	134,699	48,494	NA	NA
Library of Congress	2,697	214	483	2,000	NA	NA
National Aeronautics & Space Administration	9,201,100	2,126,566	2,216,957	4,857,577	NA	NA
National Archives & Records Administration	120	0	120	0	NA	NA
National Science Foundation	2,654,821	2,442,341	212,480	0	NA	NA
Nuclear Regulatory Commission	52,847	0	52,847	0	NA	NA
Smithsonian Institution	142,000	142,000	0	0	NA	NA
Social Security Administration	37,156	0	37,156	0	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Research		Development		
		Basic	Applied	Total	Advanced technology	Major systems
United States Arms Control & Disarmament Agency	810	0	810	0	NA	NA
United States International Trade Commission	6,065	0	6,065	0	NA	NA

- ¹ The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- ² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: NA = Not applicable (data are not collected in this category for this agency)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1997

[Dollars in millions]

Page 1 of 4

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Total, all agencies	69,829.9	16,720.0	31,418.0	1,128.2	12,561.1	3,701.0	2,962.1	821.0	261.1	257.5
Departments:										
Department of Agriculture, total	1,388.6	916.0	11.1	.0	440.9	.0	15.1	.0	2.1	3.5
Agricultural Marketing Service	4.8	4.6	.0	.0	.2	.0	.0	.0	.0	.0
Agricultural Research Service	687.6	648.7	.0	.0	31.6	.0	3.9	.0	-	3.4
Animal & Plant Hlth Inspection Svc	19.8	18.4	.0	.0	1.4	.0	.1	.0	.0	.0
Cooperative State Research, Education, & Extension Service	433.5	22.0	10.9	.0	390.9	.0	8.3	.0	1.4	.0
Economic Research Service	53.0	51.7	.0	.0	1.3	.0	.0	.0	.0	.0
Food Safety Inspection Service	-	-	.0	.0	.0	.0	.0	.0	.0	.0
Foreign Agricultural Service	1.4	.9	.0	.0	.5	.0	.0	.0	.0	.0
Forest Service	179.8	162.6	.2	.0	14.8	.0	1.4	.0	.7	.1
Grain Inspection Packers & Stockyards Administration	2.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc	3.4	3.2	.0	.0	.1	.0	.1	.0	.0	.0
Rural Business-Cooperative Svc	2.5	1.2	.0	.0	.0	.0	1.3	.0	.0	.0
Department of Commerce, total	1,003.1	664.2	230.2	.0	87.5	.1	13.9	.0	6.7	.7
Bureau of the Census	5.1	5.1	.0	.0	.0	.0	.0	.0	.0	.0
Economic Development Admin .....	.6	.1	.2	.0	.2	.0	.1	.0	.0	.0
Nat'l Inst of Standards & Tech	460.4	222.1	222.1	.0	12.3	-	3.1	.0	.0	.7
Nat'l Oceanic & Atmospheric Admin	509.3	430.0	7.9	.0	69.0	.1	2.0	.0	.4	.0
National Telecommunications & Information Administration	27.8	6.9	.0	.0	5.9	.0	8.7	.0	6.3	.0
Department of Defense, research ²	3,809.8	1,378.8	1,271.0	13.5	945.5	71.3	95.6	15.5	.7	18.0
Department of Defense, development total ³	30,978.4	6,777.5	22,825.8	80.0	399.3	179.5	111.4	484.4	17.7	102.9
Department of Defense, advanced technology development ³	4,248.6	1,023.5	2,633.2	22.9	223.4	89.9	105.1	54.2	13.7	82.7
Dept of Defense, major systems development ³	26,729.9	5,754.0	20,192.6	57.2	175.8	89.6	6.3	430.2	3.9	20.2
Department of the Army, research and development (R&D)	4,821.1	2,291.4	2,238.8	5.7	179.8	20.3	17.3	31.4	4.0	32.4
Department of the Navy, R&D	8,215.5	2,976.9	4,694.6	4.5	371.7	25.8	65.7	64.3	.0	11.9
Department of the Air Force, R&D	13,951.5	1,079.7	12,368.1	30.6	90.0	27.4	15.3	324.2	13.7	2.5
Defense Agencies, R&D, total	7,503.8	1,551.6	4,775.1	52.7	703.2	176.7	108.7	60.9	.7	74.1
Ballistic Missile Def Org, R&D	3,239.3	510.0	2,479.8	23.9	79.2	66.5	.6	19.3	.6	59.5
Defense Advanced Rsch Projects Agency, R&D	2,037.4	352.3	1,148.4	6.5	337.7	64.2	100.6	24.0	.0	3.7
Defense Info Systems Agcy, R&D	57.5	18.7	30.5	.0	.0	.3	.0	8.1	.0	.0
Defense Logistics Agency, R&D	45.2	22.7	19.5	.0	2.8	.0	.0	.2	.0	.0
Def Special Weapons Agcy, R&D	226.5	50.9	149.3	6.3	8.6	6.7	2.2	.1	.0	2.4
Joint Staff, R&D	38.5	38.5	.0	.0	.0	.0	.0	.0	.0	.0
Special Operations Command, R&D	135.1	41.3	91.4	1.6	.8	.0	.0	.0	.0	.0
Washington Headquarters Services, R&D	1,724.3	517.3	856.2	14.5	274.1	39.0	5.3	9.3	-	8.5
Operational Test & Evaluation, R&D, Director	26.6	4.0	8.2	.0	.0	.5	.0	13.9	.0	.0
Test & Evaluation, R&D, Deputy Under Secretary of Defense	269.7	252.7	11.9	.0	.0	.0	.0	5.1	.0	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1997

[Dollars in millions]

Page 2 of 4

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit insti-tutions	FFRDCs admin by nonprofit insti-tutions	State and local govts	
Department of Education	181.2	9.2	11.0	.0	116.9	.0	43.2	.0	0.9	.0
Department of Energy	5,603.5	425.4	1,229.6	853.3	583.5	2,155.6	67.9	279.9	5.9	2.5
Dept of Health & Human Svcs, total	12,787.9	2,672.9	644.6	156.9	7,202.3	37.7	1,879.8	18.1	130.2	45.4
Administration on Aging	4.4	.4	.0	.0	.4	.0	3.5	.0	.1	.0
Admin for Children & Families	17.4	1.3	1.9	.0	10.2	.0	3.9	.0	.2	.0
Agcy for Health Care Policy & Rsch	144.0	44.9	35.1	.0	39.8	.0	23.9	.0	.0	.3
Centers for Disease Control & Prevention	323.0	237.0	21.4	.0	44.3	7.0	5.5	.0	7.8	.0
Food & Drug Administration	158.6	138.5	3.4	.0	11.2	.0	5.5	.0	.0	.0
Health Care Financing Admin	43.6	.1	28.4	.0	5.8	.0	6.2	.0	2.9	.3
Health Resources & Services Admin	13.1	2.6	.0	.0	8.0	.0	2.5	.0	.0	.0
National Institutes of Health	11,993.0	2,234.1	553.6	156.9	7,057.3	30.7	1,796.9	18.1	100.5	44.8
Office of the Secretary, total	21.7	14.1	.7	.0	5.0	.0	1.6	.0	.4	.0
Office of the Asst Secretary, Planning & Evaluation	18.4	13.7	.7	.0	2.6	.0	1.0	.0	.4	.0
Off of Public Hlth & Science	3.3	.4	.0	.0	2.4	.0	.5	.0	.0	.0
Substance Abuse & Mental Health Services Administration	69.1	-	.0	.0	20.4	.0	30.3	.0	18.4	.0
Dept of Housing & Urban Development	33.5	21.2	5.7	.0	2.6	.0	3.9	.0	.0	.0
Department of the Interior, total	579.9	518.6	12.9	.0	41.0	.0	1.3	.0	4.9	1.2
Bureau of Reclamation	7.1	6.0	.0	.0	.8	.0	.3	.0	.0	.0
Geological Survey	526.3	492.1	4.9	.0	24.7	.0	.0	.0	4.7	.0
Minerals Management Service	20.6	6.3	6.7	.0	5.8	.0	.3	.0	.2	1.2
National Park Service	26.0	14.3	1.3	.0	9.7	.0	.7	.0	.0	.0
Department of Justice, total	84.7	41.6	7.0	.0	13.6	.0	6.3	.0	16.3	.0
Bureau of Prisons	4.6	2.4	.0	.0	.0	.0	.0	.0	2.2	.0
Drug Enforcement Administration ⁴	-	-	-	.0	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation	35.5	35.5	.0	.0	.0	.0	.0	.0	.0	.0
Immigration & Naturalization Service ⁵ .....	.4	-	.0	.0	.0	.0	.4	.0	.0	.0
Office of Justice Programs	44.2	3.7	7.0	.0	13.6	.0	5.9	.0	14.1	.0
Department of Labor, total	35.1	13.2	9.3	.0	4.5	.0	2.1	.0	6.0	.0
Bureau of Labor Statistics	12.6	8.6	.0	.0	4.0	.0	.0	.0	.0	.0
Employment & Training Admin	14.1	1.9	3.9	.0	.3	.0	2.1	.0	6.0	.0
Occupational Safety & Health Admin	5.5	1.6	3.9	.0	.0	.0	.0	.0	.0	.0
Office of the Secretary .....	.2	.1	.0	.0	.2	.0	.0	.0	.0	.0
Pension Benefit Guaranty Corp .....	.7	.2	.4	.0	.0	.0	.0	.0	.0	.0
Pension & Welfare Benefits Admin	2.0	.8	1.1	.0	-	.0	.0	.0	.0	.0
Department of State	1.0	.3	.6	.0	-	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1997

[Dollars in millions]

Page 3 of 4

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by nonprofit institutions	State and local govts	
Department of Transportation, total	526.9	192.0	172.6	1.9	54.3	5.2	36.4	5.6	58.1	0.7
Coast Guard	22.9	16.3	6.2	.0	.5	.0	.0	.0	.0	.0
Federal Aviation Administration	209.1	90.8	92.8	1.9	18.1	.0	.0	5.6	.0	.0
Federal Highway Administration	210.3	40.9	59.3	.0	20.0	5.2	26.5	.0	57.8	.6
Federal Railroad Administration	18.9	10.4	3.1	.0	.6	.0	4.5	.0	.2	.1
Federal Transit Administration	17.0	2.3	.3	.0	9.7	.0	4.6	.0	.1	.0
Nat'l Highway Traffic Safety Admin	36.4	23.4	6.8	.0	5.4	.0	.8	.0	.0	-
Office of the Secretary	3.5	3.5	.0	.0	.0	.0	.0	.0	.0	.0
Research & Special Programs Admin	8.7	4.5	4.2	.0	.0	.0	.0	.0	.0	.0
Department of the Treasury, total	59.7	38.7	10.9	.0	.0	.1	.0	10.0	.0	.0
Bureau of Engraving & Printing	1.7	1.6	.0	.0	.0	.1	.0	.0	.0	.0
Internal Revenue Service	50.8	33.3	7.6	.0	.0	.0	.0	10.0	.0	.0
Office of Thrift Supervision .....	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0
United States Customs Service ⁶	6.1	2.9	3.3	.0	.0	.0	.0	.0	.0	.0
United States Mint	-	-	-	.0	.0	.0	.0	.0	.0	.0
United States Secret Service .....	.4	.3	.1	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	252.7	252.7	.0	.0	.0	.0	.0	.0	.0	.0
Other agencies:										
Appalachian Regional Commission .....	.9	.1	.1	.0	.7	.0	.0	.0	.0	.0
Consumer Product Safety Commission .....	.1	.1	-	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agency	492.2	257.3	74.3	.0	111.0	.0	47.1	.0	1.2	1.2
Federal Communications Commission	3.1	3.1	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission .....	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation Agency, total	206.4	22.5	10.9	.0	13.9	.0	137.9	.0	.0	21.2
Agency for International Development ⁷	206.4	22.5	10.9	.0	13.9	.0	137.9	.0	.0	21.2
Library of Congress	2.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0
National Aeronautics & Space Admin	9,327.3	2,331.8	4,766.2	4.0	719.0	1,106.0	346.0	4.6	2.4	47.3
National Archives & Records Admin .....	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
National Science Foundation	2,248.5	13.7	114.4	.0	1,819.1	131.3	153.7	.5	5.9	10.0
Nuclear Regulatory Commission	62.1	15.2	3.1	18.5	5.1	14.3	.5	2.4	.0	3.0
Smithsonian Institution	130.0	130.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	13.6	5.0	6.0	.0	.4	.0	.1	.0	2.1	.0
Tennessee Valley Authority ⁸	8.9	8.9	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1997

[Dollars in millions]

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Page No. 1

Agency and subdivision	Total	Intra-mural ¹	Extramural								Foreign
			United States and territories								
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit insti-tutions	FFRDCs admin by nonprofit insti-tutions	State and local govts		
US Arms Control & Disarmament Agency	1.2	0.5	0.7	.0	.0	.0	.0	.0	.0	.0	
United States Information Agency .....	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
US International Trade Commission	5.7	5.7	.0	.0	.0	.0	.0	.0	.0	.0	

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

³ Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

⁴ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

⁵ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁶ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁷ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁸ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: - = Amount less than 50 thousand dollars
FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-9. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1998**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Total, all agencies	72,114.1	17,097.6	32,313.4	1,226.6	13,273.2	3,570.6	3,256.9	817.2	310.3	248.1
Departments:										
Department of Agriculture, total	1,441.9	954.9	13.2	.0	453.7	.0	14.9	.0	2.1	3.1
Agricultural Marketing Service	4.7	4.7	.0	.0	.0	.0	.0	.0	.0	.0
Agricultural Research Service	719.1	676.2	.0	.0	35.9	.0	3.9	.0	-	3.1
Animal & Plant Hlth Inspection Svc	19.5	18.5	.0	.0	1.0	.0	.0	.0	.0	.0
Cooperative State Research, Education, & Extension Service	428.8	23.4	13.0	.0	382.8	.0	8.2	.0	1.4	.0
Economic Research Service	71.6	53.1	.0	.0	18.5	.0	.0	.0	.0	.0
Food Safety Inspection Service	-	-	.0	.0	.0	.0	.0	.0	.0	.0
Foreign Agricultural Service	1.4	.9	.0	.0	.5	.0	.0	.0	.0	.0
Forest Service	188.0	170.8	.2	.0	14.8	.0	1.4	.0	.7	.1
Grain Inspection Packers & Stockyards Administration	2.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc	3.5	3.3	.0	.0	.2	.0	-	.0	.0	.0
Rural Business-Cooperative Svc	2.5	1.2	.0	.0	.0	.0	1.3	.0	.0	.0
Department of Commerce, total	978.7	695.1	169.3	.0	96.0	-	12.1	.0	5.5	.6
Bureau of the Census	5.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0
Economic Development Admin .....	.6	.1	.4	.0	.0	.0	.1	.0	.0	.0
Nat'l Inst of Standards & Tech	403.3	222.0	162.0	.0	16.0	-	2.7	.0	.0	.6
Nat'l Oceanic & Atmospheric Admin	543.2	459.0	6.9	.0	75.1	.0	1.9	.0	.2	.0
National Telecommunications & Information Administration	26.2	8.6	.0	.0	4.9	.0	7.4	.0	5.3	.0
Department of Defense, research ²	3,879.7	1,355.7	1,381.2	17.6	933.2	69.8	86.9	14.6	.7	20.0
Department of Defense, development total ³	30,952.9	6,394.9	23,003.6	115.4	460.7	143.2	261.0	479.1	.9	94.1
Department of Defense, advanced technology development ³	4,640.4	1,048.4	2,909.7	30.3	294.9	80.9	119.4	77.8	.0	79.0
Dept of Defense, major systems development ³	26,312.5	5,346.5	20,093.9	85.1	165.8	62.3	141.5	401.3	.9	15.1
Department of the Army, research and development (R&D)	5,152.5	2,080.2	2,700.1	15.0	264.6	16.8	20.4	41.9	1.0	12.6
Department of the Navy, R&D	8,065.7	2,917.4	4,621.2	3.9	342.9	31.3	64.4	63.8	.0	20.8
Department of the Air Force, R&D	13,851.3	822.4	12,454.2	14.5	98.1	6.4	158.2	294.5	.0	3.0
Defense Agencies, R&D, total	7,500.6	1,711.9	4,586.3	99.1	688.2	158.5	104.9	73.4	.6	77.6
Ballistic Missile Def Org, R&D	3,231.5	723.4	2,261.1	40.0	73.2	49.3	.4	24.5	.6	59.0
Defense Advanced Rsch Projects Agency, R&D	2,022.6	316.8	1,162.0	9.9	357.2	72.6	70.1	29.3	.0	4.6
Defense Info Systems Agcy, R&D	53.7	17.4	29.7	1.0	.0	.3	.0	5.3	.0	.0
Defense Logistics Agency, R&D	110.4	34.9	42.1	.0	10.1	.0	23.2	.1	.0	.0
Def Special Weapons Agcy, R&D	235.5	48.0	168.3	4.9	4.4	4.6	2.5	.5	.0	2.2
Joint Staff, R&D	54.0	54.0	.0	.0	.0	.0	.0	.0	.0	.0
Special Operations Command, R&D	154.8	46.4	106.0	1.9	.4	.0	.0	.0	.0	.0
Washington Headquarters Services, R&D	1,638.0	470.9	817.0	41.4	242.8	31.8	8.6	13.7	.0	11.8
Operational Test & Evaluation, R&D, Director	27.8	3.8	7.8	.5	.0	.0	.0	15.7	.0	.0
Test & Evaluation, R&D, Deputy Under Secretary of Defense	234.6	214.9	15.2	.0	.0	.0	.0	4.4	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-9. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1998**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Department of Education	211.8	9.8	16.7	.0	128.5	.0	55.9	.0	0.9	.0
Department of Energy	5,833.1	535.1	1,233.8	907.4	584.2	2,206.5	67.4	292.1	4.4	2.3
Dept of Health & Human Svcs, total	13,717.8	2,957.2	680.2	168.4	7,658.0	39.3	2,002.2	19.3	144.5	48.6
Administration on Aging	10.4	.4	.0	.0	.7	.0	5.4	.0	3.9	.0
Admin for Children & Families	20.1	.8	2.1	.0	12.5	.0	4.4	.0	.2	.0
Agcy for Health Care Policy & Rsch	146.5	50.0	34.7	.0	38.5	.0	23.1	.0	.0	.3
Centers for Disease Control & Prevention	358.5	272.4	21.4	.0	44.3	7.0	5.5	.0	7.8	.0
Food & Drug Administration	159.1	138.9	3.5	.0	11.2	.0	5.5	.0	.0	.0
Health Care Financing Admin	50.0	.1	32.6	.0	6.6	.0	7.2	.0	3.3	.3
Health Resources & Services Admin	13.5	2.7	.0	.0	8.3	.0	2.6	.0	.0	.0
National Institutes of Health	12,866.9	2,487.4	583.4	168.4	7,508.9	32.3	1,911.9	19.3	107.3	48.1
Office of the Secretary, total	16.8	4.6	2.5	.0	5.0	.0	3.2	.0	1.5	.0
Office of the Asst Secretary, Planning & Evaluation	14.0	4.3	2.5	.0	3.0	.0	2.7	.0	1.5	.0
Off of Public Hlth & Science	2.8	.3	.0	.0	2.0	.0	.5	.0	.0	.0
Substance Abuse & Mental Health Services Administration	76.0	-	.0	.0	22.0	.0	33.4	.0	20.5	.0
Dept of Housing & Urban Development	39.6	25.0	6.7	.0	3.2	.0	4.7	.0	.0	.0
Department of the Interior, total	613.3	541.9	17.3	.0	45.7	.0	1.1	.0	5.8	1.5
Bureau of Reclamation	9.0	7.8	.0	.0	1.0	.0	.1	.0	.0	.0
Geological Survey	545.3	507.1	8.0	.0	24.8	.0	.0	.0	5.4	.0
Minerals Management Service	25.4	6.8	7.5	.0	8.9	.0	.3	.0	.4	1.5
National Park Service	33.5	20.1	1.7	.0	11.0	.0	.7	.0	.0	.0
Department of Justice, total	102.9	42.2	2.7	.0	25.1	.0	18.8	.0	14.1	.0
Bureau of Prisons	6.0	2.4	.0	.0	.0	.0	.0	.0	3.6	.0
Drug Enforcement Administration ⁴	-	-	-	.0	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation	35.7	35.7	.0	.0	.0	.0	.0	.0	.0	.0
Immigration & Naturalization Service ⁵ .....	.4	-	.0	.0	.0	.0	.4	.0	.0	.0
Office of Justice Programs	60.7	4.1	2.6	.0	25.1	.0	18.4	.0	10.5	.0
Department of Labor, total	46.8	16.8	9.0	.0	.3	.0	5.2	.0	15.7	.0
Bureau of Labor Statistics	12.4	12.4	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin	27.1	1.5	4.6	.0	.1	.0	5.2	.0	15.7	.0
Occupational Safety & Health Admin	4.5	1.6	2.9	.0	.0	.0	.0	.0	.0	.0
Office of the Secretary .....	.2	.1	.0	.0	.2	.0	.0	.0	.0	.0
Pension Benefit Guaranty Corp .....	.7	.3	.4	.0	.0	.0	.0	.0	.0	.0
Pension & Welfare Benefits Admin	2.0	.9	1.1	.0	.0	.0	.0	.0	.0	.0
Department of State	1.0	.3	.6	.0	.0	-	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-9. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1998**

[Dollars in millions]

Page 3 of 4

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Department of Transportation, total	664.7	265.8	215.2	.0	58.1	2.3	20.9	5.4	96.8	0.2
Coast Guard	22.5	16.0	6.1	.0	.4	.0	.0	.0	.0	.0
Federal Aviation Administration	207.2	93.6	90.2	.0	18.0	.0	.0	5.4	.0	.0
Federal Highway Administration	340.9	107.3	98.2	.0	26.9	2.3	9.5	.0	96.8	.0
Federal Railroad Administration	20.0	10.1	5.7	.0	.4	.0	3.7	.0	.0	.2
Federal Transit Administration	16.5	2.3	1.0	.0	6.3	.0	6.9	.0	.0	.0
Nat'l Highway Traffic Safety Admin	42.4	27.3	8.1	.0	6.2	.0	.8	.0	.0	-
Office of the Secretary	4.1	4.1	.0	.0	.0	.0	.0	.0	.0	.0
Research & Special Programs Admin	11.1	5.1	6.0	.0	.0	.0	.0	.0	.0	.0
Department of the Treasury, total	74.2	45.3	28.9	.0	.0	.1	.0	.0	.0	.0
Bureau of Engraving & Printing	1.9	1.8	.0	.0	.0	.1	.0	.0	.0	.0
Internal Revenue Service	61.7	39.6	22.2	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision .....	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0
United States Customs Service ⁶	8.8	2.9	5.9	.0	.0	.0	.0	.0	.0	.0
United States Mint .....	.5	-	.5	.0	.0	.0	.0	.0	.0	.0
United States Secret Service .....	.6	.3	.3	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	299.3	299.3	.0	.0	.0	.0	.0	.0	.0	.0
Other agencies:										
Appalachian Regional Commission .....	.9	.1	.3	.0	.1	.0	.3	.0	.2	.0
Consumer Product Safety Commission .....	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agency	606.0	289.3	83.5	.0	177.5	.0	52.9	.0	1.4	1.4
Federal Communications Commission	3.5	3.5	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation										
Agency, total	183.9	21.0	8.5	.0	12.2	.0	125.5	.0	.0	16.7
Agency for International Development ⁷	183.9	21.0	8.5	.0	12.2	.0	125.5	.0	.0	16.7
Library of Congress	2.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0
National Aeronautics & Space Admin	9,850.7	2,462.7	5,284.6	4.0	719.0	960.7	365.4	4.6	2.4	47.3
National Archives & Records Admin .....	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
National Science Foundation	2,356.9	14.4	117.8	.0	1,908.2	138.2	161.2	.6	6.2	10.4
Nuclear Regulatory Commission	50.7	14.0	3.5	13.8	5.1	10.5	.4	1.5	.0	1.9
Smithsonian Institution	134.0	134.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	56.1	6.3	36.1	.0	4.7	.0	.3	.0	8.7	.0
Tennessee Valley Authority ⁸	2.9	2.9	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-9. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1998**

[Dollars in millions]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
US Arms Control & Disarmament Agency	0.8	0.3	0.5	.0	.0	.0	.0	.0	.0	.0
United States Information Agency .....	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
US International Trade Commission	5.8	5.8	.0	.0	.0	.0	.0	.0	.0	.0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

³ Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

⁴ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

⁵ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁶ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁷ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁸ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: - = Amount less than 50 thousand dollars
FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-10. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1999

[Dollars in millions]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Total, all agencies	73,333.2	17,463.3	31,830.5	1,326.3	14,170.5	3,894.4	3,245.0	841.5	328.1	233.6
Departments:										
Department of Agriculture, total	1,425.6	994.9	11.8	.0	403.3	.0	10.1	.0	2.1	3.4
Agricultural Marketing Service	4.8	4.8	.0	.0	.0	.0	.0	.0	.0	.0
Agricultural Research Service	751.2	716.3	.0	.0	29.2	.0	2.4	.0	-	3.3
Animal & Plant Hlth Inspection Svc	19.0	18.0	.0	.0	1.0	.0	.0	.0	.0	.0
Cooperative State Research, Education, & Extension Service	395.7	23.0	11.7	.0	355.4	.0	4.3	.0	1.3	.0
Economic Research Service	55.8	53.6	.0	.0	2.2	.0	.0	.0	.0	.0
Food Safety Inspection Service	-	-	.0	.0	.0	.0	.0	.0	.0	.0
Foreign Agricultural Service	1.4	.9	.0	.0	.5	.0	.0	.0	.0	.0
Forest Service	188.0	170.8	.2	.0	14.8	.0	1.4	.0	.7	.1
Grain Inspection Packers & Stockyards Administration	2.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc	3.4	3.2	.0	.0	.2	.0	-	.0	.0	.0
Rural Business-Cooperative Svc	3.4	1.4	.0	.0	.0	.0	2.0	.0	.0	.0
Department of Commerce, total	1,035.5	694.7	242.5	.0	78.0	-	13.2	.0	6.3	.7
Bureau of the Census	9.1	9.1	.0	.0	.0	.0	.0	.0	.0	.0
Economic Development Admin .....	.6	.1	.4	.0	.0	.0	.1	.0	.0	.0
Nat'l Inst of Standards & Tech	483.9	233.6	234.3	.0	12.0	-	3.3	.0	.0	.7
Nat'l Oceanic & Atmospheric Admin	516.2	445.2	7.8	.0	60.7	.0	1.9	.0	.6	.0
National Telecommunications & Information Administration	25.8	6.8	.0	.0	5.3	.0	8.0	.0	5.7	.0
Department of Defense, research ²	4,088.9	1,367.0	1,414.6	16.7	1,082.7	93.4	86.6	12.4	.4	15.1
Department of Defense, development total ³	30,261.5	6,460.9	22,612.8	126.9	290.6	118.7	69.3	503.5	1.0	77.9
Department of Defense, advanced technology development ³	3,928.7	795.7	2,696.3	16.8	167.6	54.9	54.0	77.1	.0	66.3
Dept of Defense, major systems development ³	26,332.8	5,665.2	19,916.4	110.1	123.0	63.8	15.4	426.4	1.0	11.6
Department of the Army, research and development (R&D)	4,834.1	1,985.7	2,627.8	15.4	124.5	18.6	17.2	41.4	.1	3.5
Department of the Navy, R&D	8,287.2	3,024.8	4,722.8	22.3	339.3	36.9	57.4	70.5	.0	13.2
Department of the Air Force, R&D	13,627.4	1,030.9	12,141.5	21.1	107.1	6.9	5.6	311.4	1.0	1.9
Defense Agencies, R&D, total	7,325.5	1,555.4	4,512.6	84.5	802.3	149.8	75.8	70.3	.3	74.4
Ballistic Missile Def Org, R&D	3,182.4	696.1	2,279.2	31.3	53.4	39.9	.3	21.6	.3	60.3
Defense Advanced Rsch Projects Agency, R&D	2,036.7	206.1	1,170.2	6.1	492.1	71.6	66.4	19.8	.0	4.5
Defense Info Systems Agcy, R&D	115.1	48.7	55.7	.5	.0	.3	5.6	4.3	.0	.0
Defense Logistics Agency, R&D	63.1	32.3	27.7	.0	2.9	.2	.0	.1	.0	.0
Def Special Weapons Agcy, R&D	265.5	56.6	191.1	2.9	4.0	6.8	1.6	.2	.0	2.3
Joint Staff, R&D	69.5	69.5	.0	.0	.0	.0	.0	.0	.0	.0
Special Operations Command, R&D	152.4	45.7	105.8	.4	.5	.0	.0	.0	.0	.0
Washington Headquarters Services, R&D	1,440.7	400.5	682.9	43.3	249.5	31.0	1.9	24.3	.0	7.2
Operational Test & Evaluation, R&D, Director	25.3	2.6	5.3	.3	.0	.0	.0	17.0	.0	.0
Test & Evaluation, R&D, Deputy Under Secretary of Defense	251.0	228.5	17.2	.0	.0	.0	.0	5.3	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-10. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1999**

[Dollars in millions]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
Department of Education	262.7	10.3	16.6	.0	174.3	.0	60.6	.0	0.9	.0
Department of Energy	6,540.8	755.5	1,440.6	979.3	597.7	2,404.1	65.1	292.2	4.1	2.1
Dept of Health & Human Svcs, total	14,821.0	3,079.9	748.7	182.1	8,354.8	42.6	2,185.2	20.9	152.6	54.3
Administration on Aging	10.4	.4	.0	.0	.5	.0	6.8	.0	2.7	.0
Admin for Children & Families	32.9	.8	3.5	.0	20.9	.0	7.4	.0	.3	.0
Agcy for Health Care Policy & Rsch	171.4	53.5	42.4	.0	47.1	.0	28.3	.0	.0	.3
Centers for Disease Control & Prevention	365.2	279.2	21.4	.0	44.3	7.0	5.5	.0	7.8	.0
Food & Drug Administration	169.4	147.9	3.7	.0	11.9	.0	5.9	.0	.0	.0
Health Care Financing Admin	50.0	.1	32.6	.0	6.6	.0	7.2	.0	3.3	.3
Health Resources & Services Admin	13.7	2.8	.0	.0	8.3	.0	2.6	.0	.0	.0
National Institutes of Health	13,915.0	2,590.5	642.5	182.1	8,188.2	35.6	2,085.0	20.9	116.4	53.7
Office of the Secretary, total	16.9	4.6	2.5	.0	5.1	.0	3.2	.0	1.5	.0
Office of the Asst Secretary, Planning & Evaluation	14.0	4.3	2.5	.0	3.0	.0	2.7	.0	1.5	.0
Off of Public Hlth & Science	2.9	.3	.0	.0	2.1	.0	.5	.0	.0	.0
Substance Abuse & Mental Health Services Administration	76.0	-	.0	.0	22.0	.0	33.4	.0	20.5	.0
Dept of Housing & Urban Development	50.5	31.8	8.6	.0	4.0	.0	6.1	.0	.0	.0
Department of the Interior, total	637.9	564.7	16.8	.0	48.0	.0	1.0	.0	5.6	1.8
Bureau of Reclamation	10.2	9.2	.0	.0	1.0	.0	.0	.0	.0	.0
Geological Survey	566.2	527.9	6.3	.0	26.9	.0	.0	.0	5.1	.0
Minerals Management Service	27.5	7.0	8.8	.0	9.0	.0	.3	.0	.5	1.8
National Park Service	34.0	20.6	1.7	.0	11.0	.0	.7	.0	.0	.0
Department of Justice, total	97.9	45.0	9.0	.0	9.9	.0	11.6	.0	22.4	.0
Bureau of Prisons	6.2	2.4	.0	.0	.0	.0	.0	.0	3.8	.0
Drug Enforcement Administration ⁴	-	-	-	.0	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation	35.8	35.8	.0	.0	.0	.0	.0	.0	.0	.0
Immigration & Naturalization Service ⁵ .....	.4	-	.0	.0	.0	.0	.4	.0	.0	.0
Office of Justice Programs	55.5	6.8	9.0	.0	9.9	.0	11.2	.0	18.6	.0
Department of Labor, total	69.4	17.6	11.7	.0	.3	.0	10.0	.0	29.9	.0
Bureau of Labor Statistics	12.4	12.4	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin	49.4	2.3	7.1	.0	.1	.0	10.0	.0	29.9	.0
Occupational Safety & Health Admin	4.6	1.7	3.0	.0	.0	.0	.0	.0	.0	.0
Office of the Secretary .....	.2	.1	.0	.0	.2	.0	.0	.0	.0	.0
Pension Benefit Guaranty Corp .....	.7	.3	.4	.0	.0	.0	.0	.0	.0	.0
Pension & Welfare Benefits Admin	2.1	.9	1.2	.0	.0	.0	.0	.0	.0	.0
Department of State	1.0	.3	.6	.0	.0	-	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-10. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1999

[Dollars in millions]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit insti-tutions	FFRDCs admin by nonprofit insti-tutions	State and local govts	
Department of Transportation, total	767.9	288.5	305.6	2.1	58.0	4.9	22.1	5.0	81.6	0.1
Coast Guard	19.3	13.5	5.5	.3	.0	.0	.0	.0	.0	.0
Federal Aviation Administration	290.0	88.7	178.3	.0	18.0	.0	.0	5.0	.0	.0
Federal Highway Administration	360.2	127.2	106.3	1.8	28.3	4.9	10.1	.0	81.6	.0
Federal Railroad Administration	20.1	11.2	4.7	.0	.8	.0	3.3	.0	.0	.1
Federal Transit Administration	16.2	2.4	.0	.0	6.3	.0	7.5	.0	.0	.0
Nat'l Highway Traffic Safety Admin	51.4	38.4	7.2	.0	4.6	.0	1.2	.0	.0	.0
Office of the Secretary	3.5	3.5	.0	.0	.0	.0	.0	.0	.0	.0
Research & Special Programs Admin	7.2	3.5	3.7	.0	.0	.0	.0	.0	.0	.0
Department of the Treasury, total	75.3	46.1	29.1	.0	.0	.1	.0	.0	.0	.0
Bureau of Engraving & Printing	1.9	1.8	.0	.0	.0	.1	.0	.0	.0	.0
Internal Revenue Service	62.9	40.2	22.7	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision .....	.8	.8	.0	.0	.0	.0	.0	.0	.0	.0
United States Customs Service ⁶	8.8	2.9	5.9	.0	.0	.0	.0	.0	.0	.0
United States Mint .....	.2	-	.2	.0	.0	.0	.0	.0	.0	.0
United States Secret Service .....	.8	.4	.3	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	300.0	300.0	.0	.0	.0	.0	.0	.0	.0	.0
Other agencies:										
Appalachian Regional Commission .....	.9	.1	.3	.0	.1	.0	.3	.0	.2	.0
Consumer Product Safety Commission ....	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agency	610.0	291.2	84.1	.0	178.6	.0	53.3	.0	1.4	1.4
Federal Communications Commission	3.3	3.3	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation										
Agency, total	184.2	21.0	8.2	.0	12.0	.0	127.0	.0	.0	15.9
Agency for International Development ⁷	184.2	21.0	8.2	.0	12.0	.0	127.0	.0	.0	15.9
Library of Congress	2.7	2.7	.0	.0	.0	.0	.0	.0	.0	.0
National Aeronautics & Space Admin	9,201.1	2,300.3	4,719.2	4.0	719.0	1,063.0	341.3	4.6	2.4	47.3
National Archives & Records Admin .....	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
National Science Foundation	2,654.8	16.2	132.0	.0	2,149.9	155.9	181.6	.6	7.0	11.7
Nuclear Regulatory Commission	52.8	15.2	1.9	15.2	4.5	11.6	.3	2.3	.0	1.9
Smithsonian Institution	142.0	142.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	37.2	6.4	15.2	.0	5.1	.0	.2	.0	10.4	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-10. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1999**

[Dollars in millions]

Page 4 of 4

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	
US Arms Control & Disarmament Agency	0.8	0.3	0.5	.0	.0	.0	.0	.0	.0	.0
US International Trade Commission	6.1	6.1	.0	.0	.0	.0	.0	.0	.0	.0

- ¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
- ² Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.
- ³ Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.
- ⁴ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ⁵ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ⁶ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁷ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: - = Amount less than 50 thousand dollars
FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-11. Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Research and development				R&D plant			
	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts
Total, all agencies	5,650,207	1,128,234	3,701,010	820,963	661,246	60,536	548,753	51,957
Department of Commerce, total	80	0	80	0	0	0	0	0
Nat'l Inst of Standards & Tech	19	0	19	0	0	0	0	0
Nat'l Oceanic & Atmospheric Admin	61	0	61	0	0	0	0	0
Department of Defense, total	844,165	93,508	250,754	499,903	0	0	0	0
Department of the Army	57,432	5,687	20,338	31,407	0	0	0	0
Department of the Navy	94,600	4,542	25,779	64,279	0	0	0	0
Department of the Air Force	382,217	30,563	27,411	324,243	0	0	0	0
Defense Agencies, total	290,363	52,716	176,707	60,940	0	0	0	0
Ballistic Missile Defense Org	109,663	23,874	66,512	19,277	0	0	0	0
Defense Adv Rsch Projects Agcy	94,713	6,466	64,203	24,044	0	0	0	0
Defense Info Systems Agcy	8,350	0	300	8,050	0	0	0	0
Defense Logistics Agency	188	0	0	188	0	0	0	0
Defense Special Weapons Agcy	13,045	6,260	6,725	60	0	0	0	0
Special Operations Command	1,638	1,638	0	0	0	0	0	0
Washington Headquarters Services	62,766	14,478	38,967	9,321	0	0	0	0
Operational Test & Evaluation, Director	14,420	0	519	13,901	0	0	0	0
Test & Evaluation, Deputy Under Secretary of Defense	5,133	0	0	5,133	0	0	0	0
Department of Energy	3,288,799	853,307	2,155,640	279,852	646,431	60,536	533,938	51,957
Dept of Health & Human Svcs, total	212,722	156,946	37,706	18,070	0	0	0	0
Centers for Disease Control & Prevention	7,002	0	7,002	0	0	0	0	0
National Institutes of Health	205,720	156,946	30,704	18,070	0	0	0	0
Department of Transportation, total	12,712	1,905	5,217	5,590	0	0	0	0
Federal Aviation Administration	7,495	1,905	0	5,590	0	0	0	0
Federal Highway Administration	5,217	0	5,217	0	0	0	0	0
Department of the Treasury, total	10,098	0	98	10,000	0	0	0	0
Bureau of Engraving & Printing	98	0	98	0	0	0	0	0
Internal Revenue Service	10,000	0	0	10,000	0	0	0	0
Other agencies:								
National Aeronautics & Space Admin	1,114,610	4,046	1,105,958	4,606	0	0	0	0
National Science Foundation	131,801	0	131,260	541	14,815	0	14,815	0
Nuclear Regulatory Commission	35,220	18,522	14,297	2,401	0	0	0	0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-12. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 1998

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Research and development				R&D plant			
	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts
Total, all agencies	5,614,445	1,226,623	3,570,607	817,215	690,877	36,619	634,777	19,481
Department of Commerce, total	19	0	19	0	0	0	0	0
Nat'l Inst of Standards & Tech	19	0	19	0	0	0	0	0
Department of Defense, total	839,735	132,986	213,004	493,745	0	0	0	0
Department of the Army	73,644	15,021	16,767	41,856	0	0	0	0
Department of the Navy	98,977	3,894	31,275	63,808	0	0	0	0
Department of the Air Force	315,434	14,467	6,437	294,530	0	0	0	0
Defense Agencies, total	331,038	99,104	158,525	73,409	0	0	0	0
Ballistic Missile Defense Org	113,715	39,952	49,261	24,502	0	0	0	0
Defense Adv Rsch Projects Agcy	111,814	9,937	72,556	29,321	0	0	0	0
Defense Info Systems Agcy	6,598	1,006	312	5,280	0	0	0	0
Defense Logistics Agency	100	0	0	100	0	0	0	0
Defense Special Weapons Agcy	10,035	4,882	4,626	527	0	0	0	0
Special Operations Command	1,886	1,886	0	0	0	0	0	0
Washington Headquarters Services	86,890	41,441	31,770	13,679	0	0	0	0
Operational Test & Evaluation, Director	16,205	500	0	15,705	0	0	0	0
Test & Evaluation, Deputy Under Secretary of Defense	4,437	0	0	4,437	0	0	0	0
Department of Energy	3,405,969	907,373	2,206,536	292,060	675,570	36,619	619,470	19,481
Dept of Health & Human Svcs, total	227,036	168,391	39,331	19,314	0	0	0	0
Centers for Disease Control & Prevention	7,002	0	7,002	0	0	0	0	0
National Institutes of Health	220,034	168,391	32,329	19,314	0	0	0	0
Department of State	15	0	15	0	0	0	0	0
Department of Transportation, total	7,703	0	2,259	5,444	0	0	0	0
Federal Aviation Administration	5,444	0	0	5,444	0	0	0	0
Federal Highway Administration	2,259	0	2,259	0	0	0	0	0
Department of the Treasury, total	96	0	96	0	0	0	0	0
Bureau of Engraving & Printing	96	0	96	0	0	0	0	0
Other agencies:								
National Aeronautics & Space Admin	969,366	4,046	960,714	4,606	0	0	0	0
National Science Foundation	138,751	0	138,181	570	15,307	0	15,307	0
Nuclear Regulatory Commission	25,755	13,827	10,452	1,476	0	0	0	0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-13. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 1999

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Research and development				R&D plant			
	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by industrial firms	Admin by univs & colleges	Admin by other nonprofit insts
Total, all agencies	6,062,258	1,326,343	3,894,366	841,549	856,166	196,827	643,429	15,910
Department of Commerce, total	19	0	19	0	0	0	0	0
Nat'l Inst of Standards & Tech	19	0	19	0	0	0	0	0
Department of Defense, total	871,632	143,605	212,133	515,894	0	0	0	0
Department of the Army	75,300	15,350	18,598	41,352	0	0	0	0
Department of the Navy	129,696	22,302	36,874	70,520	0	0	0	0
Department of the Air Force	339,383	21,125	6,853	311,405	0	0	0	0
Defense Agencies, total	304,652	84,528	149,808	70,316	0	0	0	0
Ballistic Missile Defense Org	92,744	31,258	39,932	21,554	0	0	0	0
Defense Adv Rsch Projects Agcy	97,448	6,109	71,574	19,765	0	0	0	0
Defense Info Systems Agcy	5,178	515	320	4,343	0	0	0	0
Defense Logistics Agency	300	0	200	100	0	0	0	0
Defense Special Weapons Agcy	9,906	2,947	6,753	206	0	0	0	0
Special Operations Command	375	375	0	0	0	0	0	0
Washington Headquarters Services	98,701	43,324	31,029	24,348	0	0	0	0
Operational Test & Evaluation, Director	17,318	300	0	17,018	0	0	0	0
Test & Evaluation, Deputy Under Secretary of Defense	5,283	0	0	5,283	0	0	0	0
Department of Energy	3,675,658	979,281	2,404,147	292,230	841,467	196,827	628,730	15,910
Dept of Health & Human Svcs, total	245,614	182,096	42,607	20,911	0	0	0	0
Centers for Disease Control & Prevention	7,002	0	7,002	0	0	0	0	0
National Institutes of Health	238,612	182,096	35,605	20,911	0	0	0	0
Department of State	15	0	15	0	0	0	0	0
Department of Transportation, total	12,003	2,090	4,913	5,000	0	0	0	0
Coast Guard	300	300	0	0	0	0	0	0
Federal Aviation Administration	5,000	0	0	5,000	0	0	0	0
Federal Highway Administration	6,703	1,790	4,913	0	0	0	0	0
Department of the Treasury, total	85	0	85	0	0	0	0	0
Bureau of Engraving & Printing	85	0	85	0	0	0	0	0
Other agencies:								
National Aeronautics & Space Admin	1,071,615	4,046	1,062,963	4,606	0	0	0	0
National Science Foundation	156,507	0	155,865	642	14,699	0	14,699	0
Nuclear Regulatory Commission	29,110	15,225	11,619	2,266	0	0	0	0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-14. Federal obligations for research and development to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1997

[Dollars in thousands]

Page 1 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aeronautics & Space Admin	National Science Foundation	Other
Total, all FFRDCs	5,650,207	80	844,165	3,288,799	212,722	1,114,610	131,801	58,030
FFRDCs administered by industrial firms	1,128,234	0	93,508	853,307	156,946	4,046	0	20,427
Idaho National Engineering Lab	62,770	0	4,801	50,693	0	90	0	7,186
NCI Frederick Cancer Rsch & Dvlpmnt Ctr ...	156,946	0	0	0	156,946	0	0	0
Oak Ridge National Laboratory	233,785	0	4,910	220,061	0	3,050	0	5,764
Sandia National Laboratories	657,549	0	83,788	565,378	0	906	0	7,477
Savannah River Technology Center	17,184	0	9	17,175	0	0	0	0
FFRDCs administered by universities & colleges ¹	3,701,010	80	250,754	2,155,640	37,706	1,105,958	131,260	19,612
Ames Laboratory	20,448	0	1,563	18,885	0	0	0	0
Argonne National Laboratory	243,714	3	3,346	234,043	0	264	0	6,058
Brookhaven National Laboratory	222,326	13	677	211,221	3,845	30	1,148	5,392
Ernest Orlando Lawrence Berkeley National Laboratory	231,110	0	2,284	210,512	16,799	1,341	174	0
Fermi National Accelerator Lab	184,468	0	0	184,468	0	0	0	0
Jet Propulsion Laboratory	1,123,854	0	24,753	0	0	1,099,005	96	0
Lawrence Livermore National Lab	563,586	0	29,262	528,405	3,339	1,903	128	549
Lincoln Laboratory	155,294	0	155,144	0	0	150	0	0
Los Alamos National Laboratory	564,135	3	15,628	527,382	13,446	65	96	7,515
National Astronomy & Ionosphere Ctr	8,244	0	0	0	0	0	8,244	0
National Center for Atmospheric Rsch	60,560	53	160	0	0	3,200	57,147	0
National Optical Astronomy Observatories ²	33,264	0	0	0	0	0	33,264	0
National Radio Astronomy Observatory	30,813	0	0	0	0	0	30,813	0
Oak Ridge Institute for Science & Ed	9,526	8	0	8,993	277	0	150	98
Princeton Plasma Physics Laboratory	52,595	0	242	52,353	0	0	0	0
Software Engineering Institute	16,395	0	16,395	0	0	0	0	0
Stanford Linear Accelerator Center	118,244	0	0	118,244	0	0	0	0
Thomas Jefferson National Accelerator Facility ³	62,434	0	1,300	61,134	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-14. Federal obligations for research and development to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1997

[Dollars in thousands]

Page 2 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aero-nautics & Space Admin	National Science Founda-tion	Other
FFRDCs administered by nonprofit institutions ⁴	820,963	0	499,903	279,852	18,070	4,606	541	17,991
Aerospace Federally Funded Research & Development Center	215,125	0	213,867	0	0	1,107	151	0
Arroyo Center ⁵	16,779	0	16,779	0	0	0	0	0
C3I Federally Funded Research & Development Center ⁶	163,010	0	162,532	0	350	0	128	0
Center for Advanced Aviation System Development ⁶	8,605	0	3,015	0	0	0	0	5,590
Center for Naval Analyses	41,767	0	41,675	0	0	0	92	0
Critical Technologies Institute ⁵	60	0	60	0	0	0	0	0
Institute for Defense Analyses Studies & Analyses FFRDC	32,061	0	31,923	0	0	0	138	0
Logistics Management Institute ⁷	4,963	0	1,689	0	0	3,274	0	0
National Defense Research Institute ⁵	11,822	0	1,135	0	10,617	70	0	0
National Renewable Energy Laboratory ⁸	148,404	0	50	148,354	0	0	0	0
Pacific Northwest National Laboratory	145,928	0	4,739	131,498	7,103	155	32	2,401
Project Air Force ⁵	21,000	0	21,000	0	0	0	0	0
Tax Systems Modernization Institute	10,000	0	0	0	0	0	0	10,000

¹ Includes university consortia.

² Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory and the National Solar Observatory (formerly Sacramento Peak Observatory).

³ In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

⁴ That is, other than universities and colleges.

⁵ The following portions of the RAND Corp. are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), Project Air Force, the Arroyo Center, and the Critical Technologies Institute. All other agency support to RAND is reported under "other nonprofit institutions excluding FFRDCs."

⁶ Only the C3I Federally Funded Research & Development Center and the Center for Advanced Aviation System Development parts of the MITRE Corp. are FFRDCs. All other agency support to MITRE is reported under "other nonprofit institutions excluding FFRDCs."

⁷ Logistics Management Institute moved from Bethesda, MD, to McLean, VA, in May 1994.

⁸ In September 1991 the name was changed from Solar Energy Research Institute.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX as an FFRDC in November 1993.

The Department of Energy decertified Bettis Atomic Power Laboratory, Hanford Engineering Development Laboratory, and Knolls Atomic Power Laboratory as FFRDCs in October/November 1992. The Department of Energy removed from the Master Government List of FFRDCs: the Energy Technology Engineering Center in November 1995, and the Inhalation Toxicology Research Institute in May 1996.

Critical Technologies Institute (CTI), as established in 1992, supports sciences and technology policy. The National Science Foundation has determined that CTI's activities are classified as non-investment and do not fit within the definitions of basic or applied research or development.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-15. Federal obligations for R&D plant to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aero-nautics & Space Admin	National Science Founda-tion	Other
Total, all FFRDCs	661,246	0	0	646,431	0	0	14,815	0
FFRDCs administered by industrial firms	60,536	0	0	60,536	0	0	0	0
Idaho National Engineering Lab	305	0	0	305	0	0	0	0
Oak Ridge National Laboratory	18,271	0	0	18,271	0	0	0	0
Sandia National Laboratories	41,960	0	0	41,960	0	0	0	0
FFRDCs administered by universities & colleges ¹	548,753	0	0	533,938	0	0	14,815	0
Ames Laboratory	4,506	0	0	4,506	0	0	0	0
Argonne National Laboratory	25,387	0	0	25,387	0	0	0	0
Brookhaven National Laboratory	104,491	0	0	104,491	0	0	0	0
Ernest Orlando Lawrence Berkeley National Laboratory	40,039	0	0	40,039	0	0	0	0
Fermi National Accelerator Lab	80,943	0	0	80,943	0	0	0	0
Lawrence Livermore National Lab	156,794	0	0	156,794	0	0	0	0
Los Alamos National Laboratory	54,010	0	0	54,010	0	0	0	0
National Center for Atmospheric Rsch	14,598	0	0	0	0	0	14,598	0
National Optical Astronomy Observatories ²	217	0	0	0	0	0	217	0
Oak Ridge Institute for Science & Ed	907	0	0	907	0	0	0	0
Princeton Plasma Physics Laboratory	4,390	0	0	4,390	0	0	0	0
Stanford Linear Accelerator Center	55,153	0	0	55,153	0	0	0	0
Thomas Jefferson National Accelerator Facility ³	7,318	0	0	7,318	0	0	0	0
FFRDCs administered by nonprofit institutions ⁴	51,957	0	0	51,957	0	0	0	0
National Renewable Energy Laboratory ⁵	3,728	0	0	3,728	0	0	0	0
Pacific Northwest National Laboratory	48,229	0	0	48,229	0	0	0	0

¹ Includes university consortia.

² Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory and the National Solar Observatory (formerly Sacramento Peak Observatory).

³ In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

⁴ That is, other than universities and colleges.

⁵ In September 1991 the name was changed from Solar Energy Research Institute.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX as an FFRDC in November 1993.

The Department of Energy decertified Bettis Atomic Power Laboratory, Hanford Engineering Development Laboratory, and Knolls Atomic Power Laboratory as FFRDCs in October/November 1992. The Department of Energy removed from the Master Government List of FFRDCs: the Energy Technology Engineering Center in November 1995, and the Inhalation Toxicology Research Institute in May 1996.

Critical Technologies Institute (CTI), as established in 1992, supports sciences and technology policy. The National Science Foundation has determined that CTI's activities are classified as non-investment and do not fit within the definitions of basic or applied research or development.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	29,365,587	7,667,220	4,392,115	759,601	11,173,246	2,598,872	2,294,882	217,549	143,956	118,146
Departments:										
Department of Agriculture, total	1,290,106	822,404	11,104	0	436,657	0	14,628	0	2,138	3,175
Agricultural Marketing Service	4,171	3,990	0	0	181	0	0	0	0	0
Agricultural Research Service	625,740	590,303	0	0	28,790	0	3,538	0	9	3,100
Cooperative State Research, Education, & Extension Service	433,525	22,037	10,949	0	390,870	0	8,288	0	1,381	0
Economic Research Service	53,003	51,669	0	0	1,334	0	0	0	0	0
Foreign Agricultural Service	1,422	898	0	0	524	0	0	0	0	0
Forest Service	165,855	148,607	155	0	14,823	0	1,447	0	748	75
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,372	3,182	0	0	135	0	55	0	0	0
Rural Business-Cooperative Svc	2,468	1,168	0	0	0	0	1,300	0	0	0
Department of Commerce, total	808,058	603,535	119,846	0	79,724	44	4,149	0	365	395
Bureau of the Census	3,413	3,413	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	163	0	195	0	142	0	0	0
Nat'l Inst of Standards & Tech	331,451	205,034	111,888	0	12,067	19	2,048	0	0	395
Nat'l Oceanic & Atmospheric Admin	468,803	391,197	7,795	0	67,462	25	1,959	0	365	0
National Telecommunications & Information Administration	3,841	3,841	0	0	0	0	0	0	0	0
Department of Defense, total	3,809,817	1,378,764	1,270,994	13,490	945,452	71,265	95,640	15,491	686	18,035
Department of the Army	710,027	412,689	176,539	715	100,524	892	13,570	920	56	4,122
Department of the Navy	885,734	370,580	239,878	3,099	231,751	4,928	28,319	888	0	6,291
Department of the Air Force	816,586	449,904	264,048	576	80,434	589	14,608	4,352	0	2,075
Defense Agencies, total	1,397,470	145,591	590,529	9,100	532,743	64,856	39,143	9,331	630	5,547
Ballistic Missile Defense Org	104,745	16,518	68,561	70	7,220	9,913	432	678	630	723
Defense Adv Rsch Projects Agcy	774,824	52,189	375,223	4,092	259,721	36,045	36,954	8,223	0	2,377
Defense Info Systems Agcy	1,871	1,871	0	0	0	0	0	0	0	0
Defense Logistics Agency	7,041	7,041	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	199,624	43,551	134,201	4,938	8,632	4,349	1,506	0	0	2,447
Special Operations Command	16,138	5,030	10,644	0	464	0	0	0	0	0
Washington Headquarters Services	293,227	19,391	1,900	0	256,706	14,549	251	430	0	0
Department of Education	138,077	6,809	3,791	0	99,889	0	26,878	0	710	0
Department of Energy	3,567,697	168,077	172,973	586,554	552,213	1,872,225	49,033	162,587	2,438	1,597
Dept of Health & Human Svcs, total	11,228,052	2,305,999	554,248	137,799	6,430,508	35,203	1,603,641	16,848	102,364	41,442
Administration on Aging	175	85	0	0	90	0	0	0	0	0
Admin for Children & Families	17,380	1,251	1,874	0	10,191	0	3,867	0	197	0
Agcy for Hlth Care Policy & Rsch	134,067	35,005	35,133	0	39,782	0	23,897	0	0	250
Centers for Disease Control & Prevention	322,990	236,970	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	158,601	138,509	3,439	0	11,177	0	5,476	0	0	0
Health Care Financing Admin	43,601	64	28,356	0	5,754	0	6,235	0	2,898	294
Health Resources & Services Admin	13,136	2,614	0	0	8,016	0	2,506	0	0	0
National Institutes of Health	10,519,675	1,877,794	463,282	137,799	6,308,572	28,201	1,555,155	16,848	91,126	40,898
Office of the Secretary, total	18,427	13,707	739	0	2,625	0	1,004	0	352	0
Office of the Asst Secretary, Planning & Evaluation	18,427	13,707	739	0	2,625	0	1,004	0	352	0

See explanatory information, if any, and SOURCE at end of table.

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Dept of Housing & Urban Development ...	11,265	5,576	1,927	0	1,369	0	2,393	0	0	0
Department of the Interior, total	552,655	493,648	10,918	0	40,709	0	1,288	0	4,865	1,227
Bureau of Reclamation	5,393	4,251	0	0	849	0	293	0	0	0
Geological Survey	500,719	468,818	2,914	0	24,363	0	0	0	4,624	0
Minerals Management Service	20,592	6,306	6,703	0	5,784	0	331	0	241	1,227
National Park Service	25,951	14,273	1,301	0	9,713	0	664	0	0	0
Department of Justice, total	32,485	4,546	6,495	0	11,288	0	2,453	0	7,703	0
Bureau of Prisons	1,900	1,900	0	0	0	0	0	0	0	0
Drug Enforcement Administration ²	1	1	0	0	0	0	0	0	0	0
Immigration & Naturalization Service ³	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	30,184	2,605	6,495	0	11,288	0	2,093	0	7,703	0
Department of Labor, total	21,747	11,894	5,412	0	4,441	0	0	0	0	0
Bureau of Labor Statistics	12,600	8,600	0	0	4,000	0	0	0	0	0
Employment & Training Admin	1,503	805	373	0	325	0	0	0	0	0
Occupational Safety & Hlth Admin	5,461	1,567	3,894	0	0	0	0	0	0	0
Office of the Secretary	109	25	0	0	84	0	0	0	0	0
Pension Benefit Guaranty Corp	54	54	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,020	843	1,145	0	32	0	0	0	0	0
Department of State	976	313	648	0	15	0	0	0	0	0
Department of Transportation, total	381,205	141,911	136,084	1,905	44,463	5,217	33,417	5,590	11,872	746
Coast Guard	5,733	3,908	1,325	0	500	0	0	0	0	0
Federal Aviation Administration	159,443	63,757	70,076	1,905	18,115	0	0	5,590	0	0
Federal Highway Administration	149,170	36,593	51,900	0	17,546	5,217	25,752	0	11,586	576
Federal Railroad Administration	18,235	10,059	2,803	0	550	0	4,484	0	200	139
Federal Transit Administration	5,954	909	200	0	2,400	0	2,359	0	86	0
National Highway Traffic Safety Administration	36,397	23,373	6,819	0	5,352	0	822	0	0	31
Research & Special Programs Admin ..	6,273	3,312	2,961	0	0	0	0	0	0	0
Department of the Treasury, total	50,861	33,769	6,994	0	0	98	0	10,000	0	0
Bureau of Engraving & Printing	1,605	1,507	0	0	0	98	0	0	0	0
Internal Revenue Service	47,864	31,279	6,585	0	0	0	0	10,000	0	0
Office of Thrift Supervision	638	638	0	0	0	0	0	0	0	0
United States Customs Service ⁴	380	50	330	0	0	0	0	0	0	0
United States Secret Service	374	295	79	0	0	0	0	0	0	0
Department of Veterans Affairs	230,981	230,981	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							Foreign
			United States and territories							
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Other agencies:										
Appalachian Regional Commission	900	100	100	0	700	0	0	0	0	0
Consumer Product Safety Commission ...	78	60	18	0	0	0	0	0	0	0
Environmental Protection Agency	409,109	213,900	61,731	0	92,304	0	39,129	0	1,038	1,007
Federal Communications Commission	3,099	3,099	0	0	0	0	0	0	0	0
Federal Trade Commission	696	696	0	0	0	0	0	0	0	0
International Development Cooperation										
Agency, total	176,664	19,760	10,453	0	12,777	0	112,753	0	0	20,921
Agency for International Development ⁵	176,664	19,760	10,453	0	12,777	0	112,753	0	0	20,921
Library of Congress	796	796	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	4,184,887	1,046,222	1,894,261	1,331	596,090	469,263	155,244	4,091	1,734	16,651
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	2,248,520	13,688	114,388	0	1,819,113	131,260	153,652	541	5,903	9,975
Nuclear Regulatory Commission	62,102	15,238	3,094	18,522	5,104	14,297	471	2,401	0	2,975
Smithsonian Institution	130,000	130,000	0	0	0	0	0	0	0	0
Social Security Administration	13,618	4,974	5,961	0	430	0	113	0	2,140	0
Tennessee Valley Authority ⁶	3,987	3,987	0	0	0	0	0	0	0	0
US Arms Control & Disarmament										
Agency	1,200	525	675	0	0	0	0	0	0	0
United States Information Agency	152	152	0	0	0	0	0	0	0	0
US International Trade Commission	5,677	5,677	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1998

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	31,470,507	8,250,567	5,004,379	803,749	11,815,120	2,665,349	2,426,194	217,397	168,799	118,953
Departments:										
Department of Agriculture, total	1,339,351	857,134	13,199	0	449,458	0	14,552	0	2,137	2,871
Agricultural Marketing Service	4,098	4,098	0	0	0	0	0	0	0	0
Agricultural Research Service	654,405	615,358	0	0	32,704	0	3,538	0	9	2,796
Cooperative State Research, Education, & Extension Service	428,787	23,362	13,044	0	382,764	0	8,237	0	1,380	0
Economic Research Service	71,604	53,136	0	0	18,468	0	0	0	0	0
Foreign Agricultural Service	1,422	898	0	0	524	0	0	0	0	0
Forest Service	172,488	155,240	155	0	14,823	0	1,447	0	748	75
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,481	3,276	0	0	175	0	30	0	0	0
Rural Business-Cooperative Svc	2,516	1,216	0	0	0	0	1,300	0	0	0
Department of Commerce, total	825,636	642,936	89,185	0	89,109	19	3,817	0	216	354
Bureau of the Census	3,640	3,640	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	400	0	0	0	100	0	0	0
Nat'l Inst of Standards & Tech	305,135	205,302	81,891	0	15,740	19	1,829	0	0	354
Nat'l Oceanic & Atmospheric Admin	512,647	430,280	6,894	0	73,369	0	1,888	0	216	0
National Telecommunications & Information Administration	3,664	3,664	0	0	0	0	0	0	0	0
Department of Defense, total	3,879,668	1,355,704	1,381,209	17,607	933,156	69,775	86,891	14,645	691	19,990
Department of the Army	855,737	436,861	275,103	4,867	118,135	579	13,302	2,139	74	4,677
Department of the Navy	831,172	347,365	225,852	2,999	215,232	4,765	26,485	2,145	0	6,329
Department of the Air Force	738,437	386,294	243,219	251	89,245	313	15,817	844	0	2,454
Defense Agencies, total	1,454,322	185,184	637,035	9,490	510,544	64,118	31,287	9,517	617	6,530
Ballistic Missile Defense Org	147,880	48,553	81,609	618	5,372	9,247	340	442	617	1,082
Defense Adv Rsch Projects Agcy	848,101	68,583	422,165	4,113	270,489	41,671	28,977	8,613	0	3,490
Defense Info Systems Agcy	1,630	1,630	0	0	0	0	0	0	0	0
Defense Logistics Agency	8,016	8,016	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	170,178	40,142	116,839	4,759	1,512	3,171	1,775	22	0	1,958
Special Operations Command	19,947	5,984	13,518	0	445	0	0	0	0	0
Washington Headquarters Services	258,570	12,276	2,904	0	232,726	10,029	195	440	0	0
Department of Education	155,212	7,280	5,005	0	106,069	0	36,134	0	724	0
Department of Energy	3,748,435	228,812	199,037	622,665	549,541	1,912,903	59,241	173,046	1,629	1,561
Dept of Health & Human Svcs, total	12,051,841	2,476,060	594,320	147,988	6,899,782	37,289	1,721,202	18,092	112,668	44,440
Administration on Aging	2,385	85	0	0	200	0	100	0	2,000	0
Admin for Children & Families	20,083	783	2,123	0	12,545	0	4,439	0	193	0
Agcy for Hlth Care Policy & Rsch	136,859	40,317	34,665	0	38,517	0	23,110	0	0	250
Centers for Disease Control & Prevention	358,457	272,437	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	159,090	138,890	3,500	0	11,200	0	5,500	0	0	0
Health Care Financing Admin	50,000	50	32,590	0	6,607	0	7,154	0	3,329	270
Health Resources & Services Admin	13,534	2,697	0	0	8,256	0	2,581	0	0	0
National Institutes of Health	11,297,433	2,016,501	497,517	147,988	6,775,156	30,287	1,670,117	18,092	97,855	43,920
Office of the Secretary, total	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0
Office of the Asst Secretary, Planning & Evaluation	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0

See explanatory information, if any, and SOURCE at end of table.

Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1998

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Dept of Housing & Urban Development ...	14,122	6,990	2,415	0	1,723	0	2,994	0	0	0
Department of the Interior, total	583,219	515,929	13,572	0	45,359	0	1,093	0	5,788	1,478
Bureau of Reclamation	6,755	5,626	0	0	1,000	0	129	0	0	0
Geological Survey	517,510	483,384	4,352	0	24,420	0	0	0	5,354	0
Minerals Management Service	25,430	6,773	7,519	0	8,926	0	300	0	434	1,478
National Park Service	33,524	20,146	1,701	0	11,013	0	664	0	0	0
Department of Justice, total	44,837	4,840	1,646	0	18,027	0	10,811	0	9,513	0
Bureau of Prisons	3,213	1,900	0	0	0	0	0	0	1,313	0
Immigration & Naturalization Service ²	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	41,224	2,900	1,646	0	18,027	0	10,451	0	8,200	0
Department of Labor, total	20,635	15,386	4,573	0	175	0	501	0	0	0
Bureau of Labor Statistics	12,400	12,400	0	0	0	0	0	0	0	0
Employment & Training Admin	1,565	394	570	0	100	0	501	0	0	0
Occupational Safety & Hlth Admin	4,495	1,615	2,880	0	0	0	0	0	0	0
Office of the Secretary	100	25	0	0	75	0	0	0	0	0
Pension Benefit Guaranty Corp	55	55	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,020	897	1,123	0	0	0	0	0	0	0
Department of State	976	313	648	0	0	15	0	0	0	0
Department of Transportation, total	476,677	200,344	185,879	0	49,637	2,259	15,561	5,444	17,346	207
Coast Guard	5,626	3,835	1,391	0	400	0	0	0	0	0
Federal Aviation Administration	150,774	51,481	75,849	0	18,000	0	0	5,444	0	0
Federal Highway Administration	244,304	103,197	91,050	0	22,300	2,259	8,152	0	17,346	0
Federal Railroad Administration	19,335	9,781	5,361	0	368	0	3,660	0	0	165
Federal Transit Administration	6,246	946	0	0	2,400	0	2,900	0	0	0
National Highway Traffic Safety Administration	42,439	27,316	8,063	0	6,169	0	849	0	0	42
Research & Special Programs Admin ..	7,953	3,788	4,165	0	0	0	0	0	0	0
Department of the Treasury, total	62,672	40,433	22,143	0	0	96	0	0	0	0
Bureau of Engraving & Printing	1,807	1,711	0	0	0	96	0	0	0	0
Internal Revenue Service	58,948	37,665	21,283	0	0	0	0	0	0	0
Office of Thrift Supervision	720	720	0	0	0	0	0	0	0	0
United States Customs Service ³	600	60	540	0	0	0	0	0	0	0
United States Secret Service	597	277	320	0	0	0	0	0	0	0
Department of Veterans Affairs	276,609	276,609	0	0	0	0	0	0	0	0

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Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1998

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Other agencies:										
Appalachian Regional Commission	900	50	340	0	100	0	255	0	155	0
Consumer Product Safety Commission ...	206	206	0	0	0	0	0	0	0	0
Environmental Protection Agency	507,000	242,069	69,861	0	148,473	0	44,282	0	1,174	1,141
Federal Communications Commission	3,462	3,462	0	0	0	0	0	0	0	0
Federal Trade Commission	1,287	1,287	0	0	0	0	0	0	0	0
International Development Cooperation										
Agency, total	142,701	16,127	8,050	0	10,506	0	91,577	0	0	16,441
Agency for International										
Development ⁴	142,701	16,127	8,050	0	10,506	0	91,577	0	0	16,441
Library of Congress	671	671	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	4,729,220	1,182,306	2,255,268	1,662	596,090	494,360	175,437	4,124	1,840	18,133
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	2,356,929	14,389	117,846	0	1,908,176	138,181	161,172	570	6,192	10,403
Nuclear Regulatory Commission	50,677	13,991	3,539	13,827	5,072	10,452	386	1,476	0	1,934
Smithsonian Institution	134,000	134,000	0	0	0	0	0	0	0	0
Social Security Administration	56,053	6,258	36,114	0	4,667	0	288	0	8,726	0
Tennessee Valley Authority ⁵	636	636	0	0	0	0	0	0	0	0
US Arms Control & Disarmament										
Agency	810	280	530	0	0	0	0	0	0	0
United States Information Agency	150	150	0	0	0	0	0	0	0	0
US International Trade Commission	5,795	5,795	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

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KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	32,992,396	8,610,914	4,785,774	849,632	12,721,168	2,954,974	2,559,876	207,462	184,315	118,281
Departments:										
Department of Agriculture, total	1,320,635	894,011	11,822	0	399,709	0	9,900	0	2,076	3,117
Agricultural Marketing Service	4,176	4,176	0	0	0	0	0	0	0	0
Agricultural Research Service	683,608	651,847	0	0	26,556	0	2,154	0	9	3,042
Cooperative State Research, Education, & Extension Service	395,689	23,047	11,667	0	355,387	0	4,269	0	1,319	0
Economic Research Service	55,839	53,619	0	0	2,220	0	0	0	0	0
Foreign Agricultural Service	1,422	898	0	0	524	0	0	0	0	0
Forest Service	172,488	155,240	155	0	14,823	0	1,447	0	748	75
Grain Inspection Packers & Stockyards Administration	564	564	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,449	3,220	0	0	199	0	30	0	0	0
Rural Business-Cooperative Svc	3,400	1,400	0	0	0	0	2,000	0	0	0
Department of Commerce, total	849,545	646,259	126,426	0	71,778	19	4,132	0	524	407
Bureau of the Census	6,072	6,072	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	400	0	0	0	100	0	0	0
Nat'l Inst of Standards & Tech	348,637	216,043	118,250	0	11,802	19	2,116	0	0	407
Nat'l Oceanic & Atmospheric Admin	490,534	420,342	7,776	0	59,976	0	1,916	0	524	0
National Telecommunications & Information Administration	3,752	3,752	0	0	0	0	0	0	0	0
Department of Defense, total	4,088,899	1,366,977	1,414,579	16,738	1,082,658	93,414	86,612	12,395	415	15,111
Department of the Army	745,491	414,534	211,383	5,250	98,900	662	11,495	2,733	75	459
Department of the Navy	884,065	367,650	234,362	3,203	237,243	5,089	28,887	1,301	0	6,330
Department of the Air Force	783,657	415,980	258,734	272	105,003	105	860	870	0	1,833
Defense Agencies, total	1,675,686	168,813	710,100	8,013	641,512	87,558	45,370	7,491	340	6,489
Ballistic Missile Defense Org	114,489	34,920	61,730	743	4,078	9,305	130	2,557	340	686
Defense Adv Rsch Projects Agcy	1,033,932	46,650	483,471	4,341	389,380	58,201	43,552	4,531	0	3,806
Defense Info Systems Agcy	1,910	1,910	0	0	0	0	0	0	0	0
Defense Logistics Agency	8,248	8,248	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	213,063	49,454	149,603	2,929	1,487	6,081	1,509	3	0	1,997
Special Operations Command	18,287	5,486	12,301	0	500	0	0	0	0	0
Washington Headquarters Services	285,757	22,145	2,995	0	246,067	13,971	179	400	0	0
Department of Education	202,980	8,010	5,491	0	147,811	0	40,950	0	718	0
Department of Energy	4,128,274	391,001	241,377	654,412	552,825	2,069,268	53,075	163,532	1,422	1,362
Dept of Health & Human Svcs, total	12,981,760	2,648,565	642,006	159,493	7,446,857	39,652	1,859,608	19,468	118,264	47,847
Administration on Aging	1,085	85	0	0	500	0	500	0	0	0
Admin for Children & Families	32,928	803	3,534	0	20,881	0	7,389	0	321	0
Agcy for Hlth Care Policy & Rsch	159,665	41,708	42,374	0	47,083	0	28,250	0	0	250
Centers for Disease Control & Prevention	365,246	279,226	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	169,396	147,896	3,700	0	11,900	0	5,900	0	0	0
Health Care Financing Admin	50,000	50	32,577	0	6,605	0	7,151	0	3,327	290
Health Resources & Services Admin	13,675	2,838	0	0	8,256	0	2,581	0	0	0
National Institutes of Health	12,175,765	2,171,659	535,896	159,493	7,304,331	32,650	1,799,636	19,468	105,325	47,307
Office of the Secretary, total	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0
Office of the Asst Secretary, Planning & Evaluation	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0

See explanatory information, if any, and SOURCE at end of table.

Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Dept of Housing & Urban Development ...	18,198	9,008	3,112	0	2,220	0	3,858	0	0	0
Department of the Interior, total	608,379	537,609	14,892	0	47,551	0	964	0	5,555	1,808
Bureau of Reclamation	7,650	6,650	0	0	1,000	0	0	0	0	0
Geological Survey	539,281	503,345	4,352	0	26,500	0	0	0	5,084	0
Minerals Management Service	27,459	7,003	8,839	0	9,038	0	300	0	471	1,808
National Park Service	33,989	20,611	1,701	0	11,013	0	664	0	0	0
Department of Justice, total	47,811	8,240	7,000	0	8,337	0	7,734	0	16,500	0
Bureau of Prisons	3,300	1,900	0	0	0	0	0	0	1,400	0
Immigration & Naturalization Service ²	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	44,111	6,300	7,000	0	8,337	0	7,374	0	15,100	0
Department of Labor, total	21,204	15,428	4,107	0	175	0	1,494	0	0	0
Bureau of Labor Statistics	12,400	12,400	0	0	0	0	0	0	0	0
Employment & Training Admin	1,954	360	0	0	100	0	1,494	0	0	0
Occupational Safety & Hlth Admin	4,615	1,663	2,952	0	0	0	0	0	0	0
Office of the Secretary	100	25	0	0	75	0	0	0	0	0
Pension Benefit Guaranty Corp	57	57	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,078	923	1,155	0	0	0	0	0	0	0
Department of State	976	313	648	0	0	15	0	0	0	0
Department of Transportation, total	495,317	232,716	169,358	2,090	46,335	4,913	16,434	5,000	18,331	140
Coast Guard	4,816	3,237	1,279	300	0	0	0	0	0	0
Federal Aviation Administration	156,305	62,090	71,215	0	18,000	0	0	5,000	0	0
Federal Highway Administration	250,420	113,920	83,071	1,790	20,505	4,913	7,890	0	18,331	0
Federal Railroad Administration	19,477	10,884	4,383	0	800	0	3,270	0	0	140
Federal Transit Administration	8,370	1,895	0	0	2,400	0	4,075	0	0	0
National Highway Traffic Safety Administration	51,449	38,417	7,203	0	4,630	0	1,199	0	0	0
Research & Special Programs Admin ..	4,480	2,273	2,207	0	0	0	0	0	0	0
Department of the Treasury, total	63,921	41,276	22,560	0	0	85	0	0	0	0
Bureau of Engraving & Printing	1,784	1,699	0	0	0	85	0	0	0	0
Internal Revenue Service	59,993	38,293	21,700	0	0	0	0	0	0	0
Office of Thrift Supervision	788	788	0	0	0	0	0	0	0	0
United States Customs Service ³	600	60	540	0	0	0	0	0	0	0
United States Secret Service	756	436	320	0	0	0	0	0	0	0
Department of Veterans Affairs	275,172	275,172	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Other agencies:										
Appalachian Regional Commission	900	50	340	0	100	0	255	0	155	0
Consumer Product Safety Commission ...	236	236	0	0	0	0	0	0	0	0
Environmental Protection Agency	510,000	243,501	70,274	0	149,352	0	44,544	0	1,181	1,148
Federal Communications Commission	3,270	3,270	0	0	0	0	0	0	0	0
Federal Trade Commission	1,131	1,131	0	0	0	0	0	0	0	0
International Development Cooperation										
Agency, total	135,749	15,339	7,669	0	10,007	0	87,092	0	0	15,642
Agency for International										
Development ⁴	135,749	15,339	7,669	0	10,007	0	87,092	0	0	15,642
Library of Congress	697	697	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	4,343,523	1,085,882	1,894,509	1,674	596,090	580,124	161,129	4,159	1,837	18,119
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	2,654,821	16,223	131,979	0	2,149,853	155,865	181,584	642	6,975	11,700
Nuclear Regulatory Commission	52,847	15,152	1,945	15,225	4,460	11,619	300	2,266	0	1,880
Smithsonian Institution	142,000	142,000	0	0	0	0	0	0	0	0
Social Security Administration	37,156	6,383	15,150	0	5,050	0	211	0	10,362	0
US Arms Control & Disarmament										
Agency	810	280	530	0	0	0	0	0	0	0
US International Trade Commission	6,065	6,065	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-19. Federal obligations for research, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

Page 1 of 1

Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	29,365,587	31,470,507	32,992,396
Life sciences, total	12,661,324	13,620,800	14,386,391
Biological (excluding environmental)	5,320,190	NA	NA
Environmental biology	582,523	NA	NA
Agricultural	641,321	NA	NA
Medical	5,532,730	NA	NA
Life sciences, n.e.c.	584,560	NA	NA
Psychology, total	545,366	578,007	612,417
Biological aspects	57,759	NA	NA
Social aspects	96,688	NA	NA
Psychological sciences, n.e.c.	390,919	NA	NA
Physical sciences, total	4,148,717	4,335,018	4,577,891
Astronomy	774,740	NA	NA
Chemistry	845,458	NA	NA
Physics	2,067,582	NA	NA
Physical sciences, n.e.c.	460,937	NA	NA
Environmental sciences, total	3,045,653	3,287,604	3,260,956
Atmospheric	1,164,349	NA	NA
Geological	691,791	NA	NA
Oceanography	597,702	NA	NA
Environmental sciences, n.e.c.	591,811	NA	NA
Mathematics & computer sciences, total	1,671,848	1,830,930	2,254,941
Mathematics	301,632	NA	NA
Computer sciences	1,264,678	NA	NA
Mathematics & computer sciences, n.e.c.	105,538	NA	NA
Engineering, total	5,690,260	6,090,022	6,022,965
Aeronautical	1,352,714	NA	NA
Astronautical	596,293	NA	NA
Chemical	234,978	NA	NA
Civil	275,607	NA	NA
Electrical	622,213	NA	NA
Mechanical	254,596	NA	NA
Metallurgy & materials	860,657	NA	NA
Engineering, n.e.c.	1,493,202	NA	NA
Social sciences, total	696,298	823,746	882,990
Anthropology	20,977	NA	NA
Economics	204,271	NA	NA
Political science	14,484	NA	NA
Sociology	25,721	NA	NA
Social sciences, n.e.c.	430,845	NA	NA
Other sciences, n.e.c.	906,121	904,380	993,845

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-20. Federal obligations for research, by agency and field of science and engineering:
fiscal year 1997**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	29,365,587	12,661,324	545,366	4,148,717	3,045,653	1,671,848	5,690,260	696,298	906,121
Departments:									
Department of Agriculture, total	1,290,106	988,828	356	93,359	12,781	14,177	59,873	117,507	3,225
Agricultural Marketing Service	4,171	4,171	0	0	0	0	0	0	0
Agricultural Research Service	625,740	549,283	0	61,586	4,401	525	9,945	0	0
Cooperative State Research, Education, & Extension Service	433,525	333,023	0	25,053	3,020	0	21,038	51,391	0
Economic Research Service	53,003	0	0	0	0	0	0	53,003	0
Foreign Agricultural Service	1,422	1,422	0	0	0	0	0	0	0
Forest Service	165,855	99,079	356	6,720	5,360	10,280	28,890	11,945	3,225
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,372	0	0	0	0	3,372	0	0	0
Rural Business-Cooperative Svc	2,468	1,300	0	0	0	0	0	1,168	0
Department of Commerce, total	808,058	139,420	406	107,499	257,275	78,946	169,957	18,225	36,330
Bureau of the Census	3,413	0	406	0	0	2,341	0	609	57
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	331,451	28,156	0	86,133	463	59,517	156,965	217	0
Nat'l Oceanic & Atmospheric Admin	468,803	111,264	0	21,366	256,812	17,088	9,151	16,849	36,273
National Telecommunications & Information Administration	3,841	0	0	0	0	0	3,841	0	0
Department of Defense, total	3,809,817	291,299	77,171	379,532	374,358	605,184	1,933,425	886	147,962
Department of the Army	710,027	119,861	13,544	62,577	75,787	87,513	340,175	886	9,684
Department of the Navy	885,734	56,261	29,643	50,967	249,473	43,362	434,849	0	21,179
Department of the Air Force	816,586	39,468	21,552	142,373	18,031	61,313	512,305	0	21,544
Defense Agencies, total	1,397,470	75,709	12,432	123,615	31,067	412,996	646,096	0	95,555
Ballistic Missile Defense Org	104,745	0	0	23,717	860	28,934	51,234	0	0
Defense Adv Rsch Projects Agcy	774,824	26,475	0	7,676	745	347,336	378,484	0	14,108
Defense Info Systems Agcy	1,871	0	0	0	0	0	0	0	1,871
Defense Logistics Agency	7,041	0	7,041	0	0	0	0	0	0
Defense Special Weapons Agcy	199,624	3,804	0	44,966	11,688	795	59,207	0	79,164
Special Operations Command	16,138	605	0	0	0	0	15,121	0	412
Washington Headquarters Services	293,227	44,825	5,391	47,256	17,774	35,931	142,050	0	0
Department of Education	138,077	9,631	6,311	0	0	996	6,643	114,496	0
Department of Energy	3,567,697	220,896	0	1,756,798	350,843	411,502	802,536	0	25,122
Dept of Health & Human Svcs, total	11,228,052	9,721,330	392,026	166,615	32,165	103,322	152,259	165,743	494,592
Administration on Aging	175	0	0	0	0	0	0	175	0
Admin for Children & Families	17,380	0	0	0	0	0	0	17,380	0
Agcy for Hlth Care Policy & Rsch	134,067	49,658	560	0	0	8,642	0	32,235	42,972
Centers for Disease Control & Prevention	322,990	322,990	0	0	0	0	0	0	0
Food & Drug Administration	158,601	158,601	0	0	0	0	0	0	0
Health Care Financing Admin	43,601	43,601	0	0	0	0	0	0	0
Health Resources & Services Admin	13,136	13,136	0	0	0	0	0	0	0
National Institutes of Health	10,519,675	9,133,344	391,466	166,615	32,165	94,680	152,259	97,526	451,620
Office of the Secretary, total	18,427	0	0	0	0	0	0	18,427	0
Office of the Asst Secretary, Planning & Evaluation	18,427	0	0	0	0	0	0	18,427	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-20. Federal obligations for research, by agency and field of science and engineering:
fiscal year 1997**

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	11,265	0	0	0	38	211	279	9,265	1,472
Department of the Interior, total	552,655	140,234	0	41,555	316,872	18,613	21,177	14,204	0
Bureau of Reclamation	5,393	0	0	0	0	0	5,393	0	0
Geological Survey	500,719	130,894	0	40,759	299,114	17,658	11,948	346	0
Minerals Management Service	20,592	0	0	296	15,053	267	3,378	1,598	0
National Park Service	25,951	9,340	0	500	2,705	688	458	12,260	0
Department of Justice, total	32,485	1,000	1,100	600	0	0	400	23,298	6,087
Bureau of Prisons	1,900	0	500	0	0	0	0	1,400	0
Drug Enforcement Administration ¹	1	0	0	0	0	0	0	0	1
Immigration & Naturalization Service ²	400	0	0	0	0	0	400	0	0
Office of Justice Programs	30,184	1,000	600	600	0	0	0	21,898	6,086
Department of Labor, total	21,747	0	0	0	0	109	0	21,638	0
Bureau of Labor Statistics	12,600	0	0	0	0	0	0	12,600	0
Employment & Training Admin	1,503	0	0	0	0	0	0	1,503	0
Occupational Safety & Hlth Admin	5,461	0	0	0	0	0	0	5,461	0
Office of the Secretary	109	0	0	0	0	109	0	0	0
Pension Benefit Guaranty Corp	54	0	0	0	0	0	0	54	0
Pension & Welfare Benefits Admin	2,020	0	0	0	0	0	0	2,020	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	381,205	8,966	29,616	49,291	11,298	14,563	223,662	11,099	32,710
Coast Guard	5,733	0	647	0	651	1,433	3,002	0	0
Federal Aviation Administration	159,443	4,306	23,603	44,629	5,886	2,616	59,515	0	18,888
Federal Highway Administration	149,170	1,384	4,377	3,333	3,322	4,934	112,540	5,458	13,822
Federal Railroad Administration	18,235	0	0	0	0	630	17,605	0	0
Federal Transit Administration	5,954	0	0	0	127	0	5,309	518	0
National Highway Traffic Safety Administration	36,397	3,276	0	0	0	3,640	24,358	5,123	0
Research & Special Programs Admin ..	6,273	0	989	1,329	1,312	1,310	1,333	0	0
Department of the Treasury, total	50,861	79	295	1,862	0	10,120	3	38,502	0
Bureau of Engraving & Printing	1,605	0	0	1,602	0	0	3	0	0
Internal Revenue Service	47,864	0	0	0	0	10,000	0	37,864	0
Office of Thrift Supervision	638	0	0	0	0	0	0	638	0
United States Customs Service ³	380	0	0	260	0	120	0	0	0
United States Secret Service	374	79	295	0	0	0	0	0	0
Department of Veterans Affairs	230,981	217,508	13,345	0	0	0	128	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ...	78	23	55	0	0	0	0	0	0
Environmental Protection Agency	409,109	113,098	0	0	175,075	0	120,936	0	0
Federal Communications Commission ...	3,099	0	0	85	0	112	1,536	1,366	0
Federal Trade Commission	696	0	0	0	0	0	0	696	0
International Development Cooperation Agency, total	176,664	159,242	0	0	0	0	0	15,099	2,323
Agency for International Development ⁴	176,664	159,242	0	0	0	0	0	15,099	2,323
Library of Congress	796	0	0	0	0	0	0	0	796
National Aeronautics & Space Admin	4,184,887	268,165	19,451	1,034,197	1,061,120	80,702	1,692,628	386	28,238
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	2,248,520	330,477	5,234	477,926	445,719	333,291	442,504	87,997	125,372
Nuclear Regulatory Commission	62,102	0	0	0	0	0	62,102	0	0
Smithsonian Institution	130,000	49,472	0	38,204	5,988	0	0	34,594	1,742
Social Security Administration	13,618	0	0	0	0	0	0	13,618	0
Tennessee Valley Authority ⁵	3,987	1,596	0	696	1,695	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-20. Federal obligations for research, by agency and field of science and engineering:
fiscal year 1997**

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	1,200	60	0	378	426	0	60	126	150
United States Information Agency	152	0	0	0	0	0	152	0	0
US International Trade Commission	5,677	0	0	0	0	0	0	5,677	0

- ¹ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering:
fiscal year 1998**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	31,470,507	13,620,800	578,007	4,335,018	3,287,604	1,830,930	6,090,022	823,746	904,380
Departments:									
Department of Agriculture, total	1,339,351	1,016,211	367	93,636	12,070	15,080	61,701	136,932	3,354
Agricultural Marketing Service	4,098	4,098	0	0	0	0	0	0	0
Agricultural Research Service	654,405	577,850	0	61,699	3,378	927	10,551	0	0
Cooperative State Research, Education, & Extension Service	428,787	327,924	0	24,972	3,086	0	21,106	51,699	0
Economic Research Service	71,604	0	0	0	0	0	0	71,604	0
Foreign Agricultural Service	1,422	1,422	0	0	0	0	0	0	0
Forest Service	172,488	103,067	367	6,965	5,606	10,672	30,044	12,413	3,354
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,481	0	0	0	0	3,481	0	0	0
Rural Business-Cooperative Svc	2,516	1,300	0	0	0	0	0	1,216	0
Department of Commerce, total	825,636	148,807	422	105,712	274,434	76,173	157,530	20,604	41,954
Bureau of the Census	3,640	0	422	0	0	2,503	0	654	61
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	305,135	25,552	0	82,155	458	54,099	142,675	196	0
Nat'l Oceanic & Atmospheric Admin	512,647	123,255	0	23,557	273,976	19,571	11,191	19,204	41,893
National Telecommunications & Information Administration	3,664	0	0	0	0	0	3,664	0	0
Department of Defense, total	3,879,668	396,813	71,330	401,263	366,777	691,508	1,844,271	451	107,255
Department of the Army	855,737	212,377	12,003	68,450	82,816	90,060	377,621	451	11,959
Department of the Navy	831,172	53,432	25,041	64,539	243,733	39,665	404,762	0	0
Department of the Air Force	738,437	37,709	25,086	138,678	13,616	79,946	421,733	0	21,669
Defense Agencies, total	1,454,322	93,295	9,200	129,596	26,612	481,837	640,155	0	73,627
Ballistic Missile Defense Org	147,880	0	0	30,816	841	36,362	79,861	0	0
Defense Adv Rsch Projects Agcy	848,101	55,147	0	14,643	6,810	406,258	348,539	0	16,704
Defense Info Systems Agcy	1,630	0	0	0	0	0	0	0	1,630
Defense Logistics Agency	8,016	0	8,016	0	0	0	0	0	0
Defense Special Weapons Agcy	170,178	3,589	0	49,100	5,786	7,978	48,834	0	54,891
Special Operations Command	19,947	644	0	0	0	0	18,901	0	402
Washington Headquarters Services	258,570	33,915	1,184	35,037	13,175	31,239	144,020	0	0
Department of Education	155,212	11,309	7,410	0	0	1,170	7,800	127,523	0
Department of Energy	3,748,435	245,142	0	1,853,240	354,831	473,665	804,175	0	17,382
Dept of Health & Human Svcs, total	12,051,841	10,440,948	420,423	178,928	34,548	110,468	163,519	173,439	529,568
Administration on Aging	2,385	0	0	0	0	0	0	2,385	0
Admin for Children & Families	20,083	0	0	0	0	0	0	20,083	0
Agcy for Hlth Care Policy & Rsch	136,859	51,278	0	0	0	8,791	0	32,232	44,558
Centers for Disease Control & Prevention	358,457	358,457	0	0	0	0	0	0	0
Food & Drug Administration	159,090	159,090	0	0	0	0	0	0	0
Health Care Financing Admin	50,000	50,000	0	0	0	0	0	0	0
Health Resources & Services Admin	13,534	13,534	0	0	0	0	0	0	0
National Institutes of Health	11,297,433	9,808,589	420,423	178,928	34,548	101,677	163,519	104,739	485,010
Office of the Secretary, total	14,000	0	0	0	0	0	0	14,000	0
Office of the Asst Secretary, Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering:
fiscal year 1998**

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	14,122	0	0	0	43	268	339	11,622	1,850
Department of the Interior, total	583,219	150,852	0	41,504	328,172	20,864	23,240	18,587	0
Bureau of Reclamation	6,755	0	0	0	0	0	6,755	0	0
Geological Survey	517,510	138,165	0	40,751	305,933	19,666	12,478	517	0
Minerals Management Service	25,430	0	0	207	19,397	372	3,543	1,911	0
National Park Service	33,524	12,687	0	546	2,842	826	464	16,159	0
Department of Justice, total	44,837	2,500	1,200	300	0	0	400	34,944	5,493
Bureau of Prisons	3,213	0	500	0	0	0	0	2,713	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Office of Justice Programs	41,224	2,500	700	300	0	0	0	32,231	5,493
Department of Labor, total	20,635	0	0	0	0	100	0	20,535	0
Bureau of Labor Statistics	12,400	0	0	0	0	0	0	12,400	0
Employment & Training Admin	1,565	0	0	0	0	0	0	1,565	0
Occupational Safety & Hlth Admin	4,495	0	0	0	0	0	0	4,495	0
Office of the Secretary	100	0	0	0	0	100	0	0	0
Pension Benefit Guaranty Corp	55	0	0	0	0	0	0	55	0
Pension & Welfare Benefits Admin	2,020	0	0	0	0	0	0	2,020	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	476,677	10,367	35,232	42,630	12,955	10,450	318,917	12,661	33,465
Coast Guard	5,626	0	713	0	715	1,439	2,759	0	0
Federal Aviation Administration	150,774	4,506	27,083	35,881	5,111	0	60,291	0	17,902
Federal Highway Administration	244,304	2,067	6,347	5,000	5,447	1,524	202,439	5,917	15,563
Federal Railroad Administration	19,335	0	0	0	0	1,136	18,199	0	0
Federal Transit Administration	6,246	0	0	0	0	0	5,045	1,201	0
National Highway Traffic Safety Administration	42,439	3,794	0	0	0	4,668	28,434	5,543	0
Research & Special Programs Admin ..	7,953	0	1,089	1,749	1,682	1,683	1,750	0	0
Department of the Treasury, total	62,672	160	437	2,007	0	300	100	59,668	0
Bureau of Engraving & Printing	1,807	0	0	1,707	0	0	100	0	0
Internal Revenue Service	58,948	0	0	0	0	0	0	58,948	0
Office of Thrift Supervision	720	0	0	0	0	0	0	720	0
United States Customs Service ²	600	0	0	300	0	300	0	0	0
United States Secret Service	597	160	437	0	0	0	0	0	0
Department of Veterans Affairs	276,609	260,433	16,022	0	0	0	154	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ..	206	0	206	0	0	0	0	0	0
Environmental Protection Agency	507,000	140,169	0	0	216,965	0	149,866	0	0
Federal Communications Commission	3,462	0	0	140	0	116	1,459	1,747	0
Federal Trade Commission	1,287	0	0	0	0	0	0	1,287	0
International Development Cooperation Agency, total	142,701	128,679	0	0	0	0	0	11,900	2,122
Agency for International Development ³	142,701	128,679	0	0	0	0	0	11,900	2,122
Library of Congress	671	0	0	0	0	0	0	0	671
National Aeronautics & Space Admin	4,729,220	268,690	19,451	1,074,291	1,211,172	80,702	2,045,864	386	28,664
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	2,356,929	347,359	5,507	502,403	468,943	350,066	459,770	92,060	130,821
Nuclear Regulatory Commission	50,677	0	0	0	0	0	50,677	0	0
Smithsonian Institution	134,000	52,319	0	38,169	6,421	0	0	35,316	1,775
Social Security Administration	56,053	0	0	0	0	0	0	56,053	0
Tennessee Valley Authority ⁴	636	0	0	423	213	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	810	42	0	252	60	0	90	360	6
United States Information Agency	150	0	0	0	0	0	150	0	0
US International Trade Commission	5,795	0	0	0	0	0	0	5,795	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁴ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering:
fiscal year 1999**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	32,992,396	14,386,391	612,417	4,577,891	3,260,956	2,254,941	6,022,965	882,990	993,845
Departments:									
Department of Agriculture, total	1,320,635	1,024,588	367	93,776	11,561	15,090	57,471	114,428	3,354
Agricultural Marketing Service	4,176	4,176	0	0	0	0	0	0	0
Agricultural Research Service	683,608	603,635	0	64,453	3,529	969	11,022	0	0
Cooperative State Research, Education, & Extension Service	395,689	309,724	0	22,358	2,426	0	16,405	44,776	0
Economic Research Service	55,839	0	0	0	0	0	0	55,839	0
Foreign Agricultural Service	1,422	1,422	0	0	0	0	0	0	0
Forest Service	172,488	103,067	367	6,965	5,606	10,672	30,044	12,413	3,354
Grain Inspection Packers & Stockyards Administration	564	564	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	3,449	0	0	0	0	3,449	0	0	0
Rural Business-Cooperative Svc	3,400	2,000	0	0	0	0	0	1,400	0
Department of Commerce, total	849,545	138,128	2,662	111,566	275,313	84,894	178,682	19,497	38,803
Bureau of the Census	6,072	0	727	0	0	4,160	0	1,084	101
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	348,637	29,550	0	91,102	493	62,482	164,783	227	0
Nat'l Oceanic & Atmospheric Admin	490,534	108,578	1,935	20,464	274,820	18,252	10,147	17,636	38,702
National Telecommunications & Information Administration	3,752	0	0	0	0	0	3,752	0	0
Department of Defense, total	4,088,899	340,442	73,381	439,605	321,994	864,264	1,930,130	430	118,653
Department of the Army	745,491	111,490	14,830	72,925	38,825	98,886	396,480	430	11,625
Department of the Navy	884,065	57,373	27,257	72,300	260,629	43,484	423,022	0	0
Department of the Air Force	783,657	39,234	22,204	139,265	9,102	92,113	456,988	0	24,751
Defense Agencies, total	1,675,686	132,345	9,090	155,115	13,438	629,781	653,640	0	82,277
Ballistic Missile Defense Org	114,489	0	0	28,371	466	22,604	63,048	0	0
Defense Adv Rsch Projects Agcy	1,033,932	68,476	0	15,500	0	566,395	381,505	0	2,056
Defense Info Systems Agcy	1,910	0	0	0	0	0	0	0	1,910
Defense Logistics Agency	8,248	0	8,248	0	0	0	0	0	0
Defense Special Weapons Agcy	213,063	3,166	0	59,487	2,604	8,272	61,656	0	77,878
Special Operations Command	18,287	694	0	0	0	0	17,160	0	433
Washington Headquarters Services	285,757	60,009	842	51,757	10,368	32,510	130,271	0	0
Department of Education	202,980	11,779	7,716	0	0	1,218	8,123	174,144	0
Department of Energy	4,128,274	229,909	0	1,968,042	327,976	656,266	912,592	0	33,489
Dept of Health & Human Svcs, total	12,981,760	11,229,488	453,109	192,840	37,234	119,868	176,232	198,610	574,379
Administration on Aging	1,085	0	0	0	0	0	0	1,085	0
Admin for Children & Families	32,928	0	0	0	0	0	0	32,928	0
Agcy for Hlth Care Policy & Rsch	159,665	60,002	0	0	0	10,286	0	37,716	51,661
Centers for Disease Control & Prevention	365,246	365,246	0	0	0	0	0	0	0
Food & Drug Administration	169,396	169,396	0	0	0	0	0	0	0
Health Care Financing Admin	50,000	50,000	0	0	0	0	0	0	0
Health Resources & Services Admin	13,675	13,675	0	0	0	0	0	0	0
National Institutes of Health	12,175,765	10,571,169	453,109	192,840	37,234	109,582	176,232	112,881	522,718
Office of the Secretary, total	14,000	0	0	0	0	0	0	14,000	0
Office of the Asst Secretary, Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering:
fiscal year 1999**

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	18,198	0	0	0	55	346	437	14,976	2,384
Department of the Interior, total	608,379	162,424	0	44,973	335,276	21,984	25,190	18,532	0
Bureau of Reclamation	7,650	0	0	0	0	0	7,650	0	0
Geological Survey	539,281	149,704	0	44,306	310,477	20,851	13,426	517	0
Minerals Management Service	27,459	0	0	121	21,935	303	3,646	1,454	0
National Park Service	33,989	12,720	0	546	2,864	830	468	16,561	0
Department of Justice, total	47,811	1,000	1,200	1,000	0	0	400	40,190	4,021
Bureau of Prisons	3,300	0	500	0	0	0	0	2,800	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Office of Justice Programs	44,111	1,000	700	1,000	0	0	0	37,390	4,021
Department of Labor, total	21,204	0	0	0	0	100	0	21,104	0
Bureau of Labor Statistics	12,400	0	0	0	0	0	0	12,400	0
Employment & Training Admin	1,954	0	0	0	0	0	0	1,954	0
Occupational Safety & Hlth Admin	4,615	0	0	0	0	0	0	4,615	0
Office of the Secretary	100	0	0	0	0	100	0	0	0
Pension Benefit Guaranty Corp	57	0	0	0	0	0	0	57	0
Pension & Welfare Benefits Admin	2,078	0	0	0	0	0	0	2,078	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	495,317	10,756	31,527	50,717	9,622	15,267	319,156	19,486	38,786
Coast Guard	4,816	0	586	0	591	1,203	2,436	0	0
Federal Aviation Administration	156,305	4,029	23,482	44,941	2,619	0	60,157	0	21,077
Federal Highway Administration	250,420	2,266	6,800	4,674	5,753	6,596	200,321	6,301	17,709
Federal Railroad Administration	19,477	0	0	0	0	1,000	18,477	0	0
Federal Transit Administration	8,370	0	0	0	0	0	8,217	153	0
National Highway Traffic Safety Administration	51,449	4,461	0	0	0	5,659	28,297	13,032	0
Research & Special Programs Admin ..	4,480	0	659	1,102	659	809	1,251	0	0
Department of the Treasury, total	63,921	125	631	1,984	0	300	100	60,781	0
Bureau of Engraving & Printing	1,784	0	0	1,684	0	0	100	0	0
Internal Revenue Service	59,993	0	0	0	0	0	0	59,993	0
Office of Thrift Supervision	788	0	0	0	0	0	0	788	0
United States Customs Service ²	600	0	0	300	0	300	0	0	0
United States Secret Service	756	125	631	0	0	0	0	0	0
Department of Veterans Affairs	275,172	259,095	15,925	0	0	0	152	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ...	236	0	236	0	0	0	0	0	0
Environmental Protection Agency	510,000	140,999	0	0	218,249	0	150,752	0	0
Federal Communications Commission	3,270	0	0	140	0	70	1,610	1,450	0
Federal Trade Commission	1,131	0	0	0	0	0	0	1,131	0
International Development Cooperation Agency, total	135,749	122,395	0	0	0	0	0	11,336	2,018
Agency for International Development ³	135,749	122,395	0	0	0	0	0	11,336	2,018
Library of Congress	697	0	0	0	0	0	0	0	697
National Aeronautics & Space Admin	4,343,523	268,165	19,451	1,065,996	1,187,957	80,702	1,692,628	386	28,238
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	2,654,821	391,614	6,212	566,433	528,855	394,572	516,373	103,628	147,134
Nuclear Regulatory Commission	52,847	0	0	0	0	0	52,847	0	0
Smithsonian Institution	142,000	55,442	0	40,447	6,804	0	0	37,424	1,883
Social Security Administration	37,156	0	0	0	0	0	0	37,156	0

See explanatory information, if any, and SOURCE at end of table.

Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	810	42	0	252	60	0	90	360	6
US International Trade Commission	6,065	0	0	0	0	0	0	6,065	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-23. Federal obligations for research in psychology and life sciences,
by agency and detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 1 of 2

Agency and subdivision	Psychology				Life sciences					
	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	545,366	57,759	96,688	390,919	12,661,324	5,320,190	582,523	641,321	5,532,730	584,560
Departments:										
Department of Agriculture, total	356	0	356	0	988,828	146,549	204,399	614,583	23,297	0
Agricultural Marketing Service	0	0	0	0	4,171	0	0	4,171	0	0
Agricultural Research Service	0	0	0	0	549,283	38,813	65,967	434,383	10,120	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	333,023	87,386	66,332	171,047	8,258	0
Foreign Agricultural Service	0	0	0	0	1,422	0	0	1,422	0	0
Forest Service	356	0	356	0	99,079	20,350	72,100	1,710	4,919	0
Grain Inspection Packers & Stockyards Administration	0	0	0	0	550	0	0	550	0	0
Rural Business-Cooperative Svc	0	0	0	0	1,300	0	0	1,300	0	0
Department of Commerce, total	406	0	0	406	139,420	24,862	64,969	23,307	21,586	4,696
Bureau of the Census	406	0	0	406	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	0	0	0	0	28,156	6,583	0	974	16,703	3,896
Nat'l Oceanic & Atmospheric Admin	0	0	0	0	111,264	18,279	64,969	22,333	4,883	800
Department of Defense, total	77,171	32,381	37,205	7,585	291,299	65,878	26,290	1,390	171,428	26,313
Department of the Army	13,544	0	11,207	2,337	119,861	6,286	0	0	108,906	4,669
Department of the Navy	29,643	27,907	0	1,736	56,261	10,416	8,333	0	23,257	14,255
Department of the Air Force	21,552	750	17,290	3,512	39,468	16,003	17,957	0	0	5,508
Defense Agencies, total	12,432	3,724	8,708	0	75,709	33,173	0	1,390	39,265	1,881
Defense Adv Rsch Projects Agcy	0	0	0	0	26,475	14,736	0	0	10,463	1,276
Defense Logistics Agency	7,041	0	7,041	0	0	0	0	0	0	0
Defense Special Weapons Agcy	0	0	0	0	3,804	2,776	0	0	1,028	0
Special Operations Command	0	0	0	0	605	0	0	0	0	605
Washington Headquarters Services	5,391	3,724	1,667	0	44,825	15,661	0	1,390	27,774	0
Department of Education	6,311	0	3,654	2,657	9,631	0	0	0	1,993	7,638
Department of Energy	0	0	0	0	220,896	162,701	1,000	0	52,298	4,897
Dept of Health & Human Svcs, total	392,026	11,989	6,121	373,916	9,721,330	4,429,649	81	0	4,936,670	354,930
Agcy for Hlth Care Policy & Rsch	560	0	214	346	49,658	28	0	0	45,175	4,455
Centers for Disease Control & Prevention	0	0	0	0	322,990	0	0	0	322,990	0
Food & Drug Administration	0	0	0	0	158,601	158,601	0	0	0	0
Health Care Financing Admin	0	0	0	0	43,601	0	0	0	0	43,601
Health Resources & Services Admin	0	0	0	0	13,136	0	0	0	13,136	0
National Institutes of Health	391,466	11,989	5,907	373,570	9,133,344	4,271,020	81	0	4,555,369	306,874
Department of the Interior, total	0	0	0	0	140,234	75,904	63,741	589	0	0
Geological Survey	0	0	0	0	130,894	69,132	61,623	139	0	0
National Park Service	0	0	0	0	9,340	6,772	2,118	450	0	0
Department of Justice, total	1,100	0	900	200	1,000	500	0	0	0	500
Bureau of Prisons	500	0	300	200	0	0	0	0	0	0
Office of Justice Programs	600	0	600	0	1,000	500	0	0	0	500

See explanatory information, if any, and SOURCE at end of table.

**Table C-23. Federal obligations for research in psychology and life sciences,
by agency and detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Psychology				Life sciences					
	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Department of Transportation, total	29,616	0	28,627	989	8,966	0	567	817	4,306	3,276
Coast Guard	647	0	647	0	0	0	0	0	0	0
Federal Aviation Administration	23,603	0	23,603	0	4,306	0	0	0	4,306	0
Federal Highway Administration	4,377	0	4,377	0	1,384	0	567	817	0	0
National Highway Traffic Safety Administration	0	0	0	0	3,276	0	0	0	0	3,276
Research & Special Programs Admin ..	989	0	0	989	0	0	0	0	0	0
Department of the Treasury, total	295	0	0	295	79	0	0	0	0	79
United States Secret Service	295	0	0	295	79	0	0	0	0	79
Department of Veterans Affairs	13,345	13,317	28	0	217,508	39,104	0	0	178,404	0
Other agencies:										
Consumer Product Safety Commission ...	55	0	0	55	23	23	0	0	0	0
Environmental Protection Agency	0	0	0	0	113,098	0	91,647	0	21,451	0
International Development Cooperation Agency, total	0	0	0	0	159,242	0	0	0	0	159,242
Agency for International Development ¹	0	0	0	0	159,242	0	0	0	0	159,242
National Aeronautics & Space Admin	19,451	72	14,563	4,816	268,165	113,140	10,164	635	121,297	22,929
National Science Foundation	5,234	0	5,234	0	330,477	240,374	90,103	0	0	0
Smithsonian Institution	0	0	0	0	49,472	21,346	28,126	0	0	0
Tennessee Valley Authority ²	0	0	0	0	1,596	160	1,436	0	0	0
US Arms Control & Disarmament Agency	0	0	0	0	60	0	0	0	0	60

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

² In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-24. Federal obligations for research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chem- istry	Physics	Physi- cal sci- ences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	4,148,717	774,740	845,458	2,067,582	460,937	3,045,653	1,164,349	691,791	597,702	591,811
Departments:										
Department of Agriculture, total	93,359	0	89,036	4,323	0	12,781	11,424	1,357	0	0
Agricultural Research Service	61,586	0	58,893	2,693	0	4,401	4,237	164	0	0
Cooperative State Research, Education, & Extension Service	25,053	0	25,053	0	0	3,020	3,020	0	0	0
Forest Service	6,720	0	5,090	1,630	0	5,360	4,167	1,193	0	0
Department of Commerce, total	107,499	338	43,231	63,431	499	257,275	111,920	4,131	133,215	8,009
Nat'l Inst of Standards & Tech	86,133	338	31,642	53,654	499	463	0	463	0	0
Nat'l Oceanic & Atmospheric Admin	21,366	0	11,589	9,777	0	256,812	111,920	3,668	133,215	8,009
Department of Defense, total	379,532	1,904	112,717	192,843	72,068	374,358	63,272	12,099	117,889	181,098
Department of the Army	62,577	0	15,698	23,487	23,392	75,787	13,141	3,385	0	59,261
Department of the Navy	50,967	0	26,387	16,247	8,333	249,473	28,484	5,208	105,210	110,571
Department of the Air Force	142,373	1,904	33,412	100,591	6,466	18,031	16,206	1,547	0	278
Defense Agencies, total	123,615	0	37,220	52,518	33,877	31,067	5,441	1,959	12,679	10,988
Ballistic Missile Defense Org	23,717	0	16,000	5,008	2,709	860	860	0	0	0
Defense Adv Rsch Projects Agcy	7,676	0	373	1,317	5,986	745	0	0	745	0
Defense Special Weapons Agcy	44,966	0	0	21,174	23,792	11,688	700	0	0	10,988
Washington Headquarters Services	47,256	0	20,847	25,019	1,390	17,774	3,881	1,959	11,934	0
Department of Energy	1,756,798	0	236,888	1,282,212	237,698	350,843	88,941	57,374	7,310	197,218
Dept of Health & Human Svcs, total	166,615	0	147,911	18,704	0	32,165	0	0	0	32,165
National Institutes of Health	166,615	0	147,911	18,704	0	32,165	0	0	0	32,165
Dept of Housing & Urban Development ...	0	0	0	0	0	38	0	0	0	38
Department of the Interior, total	41,555	0	34,466	7,089	0	316,872	4,346	298,577	13,182	767
Geological Survey	40,759	0	33,966	6,793	0	299,114	787	298,327	0	0
Minerals Management Service	296	0	0	296	0	15,053	1,473	0	12,986	594
National Park Service	500	0	500	0	0	2,705	2,086	250	196	173
Department of Justice, total	600	0	300	0	300	0	0	0	0	0
Office of Justice Programs	600	0	300	0	300	0	0	0	0	0
Department of Transportation, total	49,291	10	0	45,945	3,336	11,298	7,866	0	651	2,781
Coast Guard	0	0	0	0	0	651	0	0	651	0
Federal Aviation Administration	44,629	0	0	44,629	0	5,886	5,886	0	0	0
Federal Highway Administration	3,333	10	0	1,316	2,007	3,322	1,980	0	0	1,342
Federal Transit Administration	0	0	0	0	0	127	0	0	0	127
Research & Special Programs Admin ..	1,329	0	0	0	1,329	1,312	0	0	0	1,312
Department of the Treasury, total	1,862	0	260	0	1,602	0	0	0	0	0
Bureau of Engraving & Printing	1,602	0	0	0	1,602	0	0	0	0	0
United States Customs Service ¹	260	0	260	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	0	0	0	0	0	175,075	81,641	11,391	0	82,043
Federal Communications Commission	85	0	0	0	85	0	0	0	0	0
National Aeronautics & Space Admin	1,034,197	621,324	50,579	323,151	39,143	1,061,120	663,492	201,087	125,307	71,234
National Archives & Records Admin	120	0	120	0	0	0	0	0	0	0
National Science Foundation	477,926	115,212	128,827	128,336	105,551	445,719	130,323	99,843	199,755	15,798
Smithsonian Institution	38,204	35,952	710	1,542	0	5,988	89	5,506	393	0
Tennessee Valley Authority ²	696	0	173	0	523	1,695	1,035	0	0	660
US Arms Control & Disarmament Agency	378	0	240	6	132	426	0	426	0	0

¹ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

² In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-25. Federal obligations for research in engineering, by agency and detailed field of engineering: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	5,690,260	1,352,714	596,293	234,978	275,607	622,213	254,596	860,657	1,493,202
Departments:									
Department of Agriculture, total	59,873	0	0	7,813	4,975	599	3,084	0	43,402
Agricultural Research Service	9,945	0	0	5,523	1,295	539	524	0	2,064
Cooperative State Research, Education, & Extension Service	21,038	0	0	0	0	0	0	0	21,038
Forest Service	28,890	0	0	2,290	3,680	60	2,560	0	20,300
Department of Commerce, total	169,957	0	0	19,697	14,167	50,192	4,308	47,556	34,037
Nat'l Inst of Standards & Tech	156,965	0	0	19,697	14,167	41,089	4,308	47,556	30,148
Nat'l Oceanic & Atmospheric Admin	9,151	0	0	0	0	5,262	0	0	3,889
National Telecommunications & Information Administration	3,841	0	0	0	0	3,841	0	0	0
Department of Defense, total	1,933,425	220,365	140,930	30,315	60,871	474,274	183,934	403,097	419,639
Department of the Army	340,175	37,516	325	13,502	32,463	124,413	57,918	30,339	43,699
Department of the Navy	434,849	30,869	0	5,241	0	154,999	51,364	70,367	122,009
Department of the Air Force	512,305	126,966	132,531	1,940	16,248	82,900	38,211	58,125	55,384
Defense Agencies, total	646,096	25,014	8,074	9,632	12,160	111,962	36,441	244,266	198,547
Ballistic Missile Defense Org	51,234	7,987	4,550	4,433	0	14,372	0	12,343	7,549
Defense Adv Rsch Projects Agcy	378,484	13,764	0	25	5,376	14,132	575	197,906	146,706
Defense Special Weapons Agcy	59,207	232	0	897	5,903	23,129	8,994	0	20,052
Special Operations Command	15,121	0	0	0	0	0	0	0	15,121
Washington Headquarters Services	142,050	3,031	3,524	4,277	881	60,329	26,872	34,017	9,119
Department of Education	6,643	0	0	0	0	0	0	0	6,643
Department of Energy	802,536	0	1,600	119,367	37,166	24,264	16,685	275,859	327,595
Dept of Health & Human Svcs, total	152,259	0	0	0	0	0	0	0	152,259
National Institutes of Health	152,259	0	0	0	0	0	0	0	152,259
Dept of Housing & Urban Development ...	279	0	0	0	0	0	0	0	279
Department of the Interior, total	21,177	0	0	13,175	7,593	101	163	145	0
Bureau of Reclamation	5,393	0	0	0	5,393	0	0	0	0
Geological Survey	11,948	0	0	10,869	815	101	163	0	0
Minerals Management Service	3,378	0	0	2,297	936	0	0	145	0
National Park Service	458	0	0	9	449	0	0	0	0
Department of Justice, total	400	0	0	0	0	0	400	0	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Department of Transportation, total	223,662	0	0	0	112,893	4,968	20,405	8,206	77,190
Coast Guard	3,002	0	0	0	426	1,345	603	628	0
Federal Aviation Administration	59,515	0	0	0	48,044	1,214	3,470	6,787	0
Federal Highway Administration	112,540	0	0	0	61,549	589	254	0	50,148
Federal Railroad Administration	17,605	0	0	0	2,874	1,820	7,007	791	5,113
Federal Transit Administration	5,309	0	0	0	0	0	0	0	5,309
National Highway Traffic Safety Administration	24,358	0	0	0	0	0	9,071	0	15,287
Research & Special Programs Admin ..	1,333	0	0	0	0	0	0	0	1,333
Department of the Treasury, total	3	0	0	0	0	0	0	0	3
Bureau of Engraving & Printing	3	0	0	0	0	0	0	0	3
Department of Veterans Affairs	128	0	0	0	0	0	0	0	128
Other agencies:									
Environmental Protection Agency	120,936	0	0	2,665	0	0	0	0	118,271
Federal Communications Commission	1,536	0	0	0	0	418	0	0	1,118
National Aeronautics & Space Admin	1,692,628	1,132,349	453,763	3,100	209	25,013	18,254	18,956	40,984
National Science Foundation	442,504	0	0	38,846	37,733	42,232	7,363	106,838	209,492
Nuclear Regulatory Commission	62,102	0	0	0	0	0	0	0	62,102
US Arms Control & Disarmament Agency	60	0	0	0	0	0	0	0	60
United States Information Agency	152	0	0	0	0	152	0	0	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Total, all agencies	1,671,848	301,632	1,264,678	105,538	696,298	20,977	204,271	14,484	25,721	430,845
Departments:										
Department of Agriculture, total	14,177	14,177	0	0	117,507	260	106,995	0	10,252	0
Agricultural Research Service	525	525	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	51,391	0	42,124	0	9,267	0
Economic Research Service	0	0	0	0	53,003	0	53,003	0	0	0
Forest Service	10,280	10,280	0	0	11,945	260	10,700	0	985	0
Nat'l Agricultural Statistics Svc	3,372	3,372	0	0	0	0	0	0	0	0
Rural Business-Cooperative Svc	0	0	0	0	1,168	0	1,168	0	0	0
Department of Commerce, total	78,946	10,538	60,105	8,303	18,225	0	4,946	7,092	5,578	609
Bureau of the Census	2,341	0	0	2,341	609	0	0	0	0	609
Economic Development Admin	0	0	0	0	550	0	550	0	0	0
Nat'l Inst of Standards & Tech	59,517	2,642	50,913	5,962	217	0	217	0	0	0
Nat'l Oceanic & Atmospheric Admin	17,088	7,896	9,192	0	16,849	0	4,179	7,092	5,578	0
Department of Defense, total	605,184	45,369	523,539	36,276	886	0	373	0	184	329
Department of the Army	87,513	10,830	74,199	2,484	886	0	373	0	184	329
Department of the Navy	43,362	14,581	28,781	0	0	0	0	0	0	0
Department of the Air Force	61,313	10,210	29,012	22,091	0	0	0	0	0	0
Defense Agencies, total	412,996	9,748	391,547	11,701	0	0	0	0	0	0
Ballistic Missile Defense Org	28,934	1,477	22,000	5,457	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	347,336	1,248	346,058	30	0	0	0	0	0	0
Defense Special Weapons Agcy	795	0	795	0	0	0	0	0	0	0
Washington Headquarters Services	35,931	7,023	22,694	6,214	0	0	0	0	0	0
Department of Education	996	0	996	0	114,496	0	0	0	0	114,496
Department of Energy	411,502	86,759	318,568	6,175	0	0	0	0	0	0
Dept of Health & Human Svcs, total	103,322	44,484	58,495	343	165,743	32	28,987	0	1,078	135,646
Administration on Aging	0	0	0	0	175	0	0	0	0	175
Admin for Children & Families	0	0	0	0	17,380	0	0	0	0	17,380
Agcy for Hlth Care Policy & Rsch	8,642	381	7,918	343	32,235	32	28,987	0	837	2,379
National Institutes of Health	94,680	44,103	50,577	0	97,526	0	0	0	241	97,285
Office of the Secretary, total	0	0	0	0	18,427	0	0	0	0	18,427
Office of the Asst Secretary, Planning & Evaluation	0	0	0	0	18,427	0	0	0	0	18,427
Dept of Housing & Urban Development	211	0	0	211	9,265	0	7,312	119	764	1,070
Department of the Interior, total	18,613	3,247	15,366	0	14,204	5,290	753	0	77	8,084
Geological Survey	17,658	3,247	14,411	0	346	0	0	0	0	346
Minerals Management Service	267	0	267	0	1,598	0	753	0	68	777
National Park Service	688	0	688	0	12,260	5,290	0	0	9	6,961
Department of Justice, total	0	0	0	0	23,298	30	20	0	1,250	21,998
Bureau of Prisons	0	0	0	0	1,400	30	20	0	1,250	100
Office of Justice Programs	0	0	0	0	21,898	0	0	0	0	21,898
Department of Labor, total	109	0	109	0	21,638	0	21,638	0	0	0
Bureau of Labor Statistics	0	0	0	0	12,600	0	12,600	0	0	0
Employment & Training Admin	0	0	0	0	1,503	0	1,503	0	0	0
Occupational Safety & Hlth Admin	0	0	0	0	5,461	0	5,461	0	0	0
Office of the Secretary	109	0	109	0	0	0	0	0	0	0
Pension Benefit Guaranty Corp	0	0	0	0	54	0	54	0	0	0
Pension & Welfare Benefits Admin	0	0	0	0	2,020	0	2,020	0	0	0
Department of State	0	0	0	0	976	0	0	0	0	976

See explanatory information, if any, and SOURCE at end of table.

Table C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Department of Transportation, total	14,563	604	8,157	5,802	11,099	0	3,521	766	57	6,755
Coast Guard	1,433	0	1,433	0	0	0	0	0	0	0
Federal Aviation Administration	2,616	0	2,616	0	0	0	0	0	0	0
Federal Highway Administration	4,934	604	3,688	642	5,458	0	3,107	766	57	1,528
Federal Railroad Administration	630	0	420	210	0	0	0	0	0	0
Federal Transit Administration	0	0	0	0	518	0	414	0	0	104
National Highway Traffic Safety Administration	3,640	0	0	3,640	5,123	0	0	0	0	5,123
Research & Special Programs Admin ..	1,310	0	0	1,310	0	0	0	0	0	0
Department of the Treasury, total	10,120	0	10,120	0	38,502	0	2,184	0	0	36,318
Internal Revenue Service	10,000	0	10,000	0	37,864	0	1,546	0	0	36,318
Office of Thrift Supervision	0	0	0	0	638	0	638	0	0	0
United States Customs Service ¹	120	0	120	0	0	0	0	0	0	0
Other agencies:										
Appalachian Regional Commission	0	0	0	0	900	0	0	900	0	0
Federal Communications Commission	112	0	112	0	1,366	0	1,366	0	0	0
Federal Trade Commission	0	0	0	0	696	0	696	0	0	0
International Development Cooperation Agency, total	0	0	0	0	15,099	0	0	0	0	15,099
Agency for International Development ²	0	0	0	0	15,099	0	0	0	0	15,099
National Aeronautics & Space Admin	80,702	4,641	27,633	48,428	386	0	0	0	247	139
National Science Foundation	333,291	91,813	241,478	0	87,997	11,708	19,803	5,481	5,723	45,282
Smithsonian Institution	0	0	0	0	34,594	3,657	0	0	511	30,426
Social Security Administration	0	0	0	0	13,618	0	0	0	0	13,618
US Arms Control & Disarmament Agency	0	0	0	0	126	0	0	126	0	0
US International Trade Commission	0	0	0	0	5,677	0	5,677	0	0	0

¹ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

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KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 1 of 2

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	14,942,151	2,688,570	1,166,663	294,699	7,695,838	1,600,048	1,289,583	88,378	68,432	49,940
Departments:										
Department of Agriculture, total	590,097	383,519	4,944	0	194,475	0	4,643	0	700	1,816
Agricultural Research Service	364,442	343,803	0	0	16,768	0	2,061	0	5	1,805
Cooperative State Research, Education, & Extension Service	189,895	9,587	4,901	0	172,332	0	2,418	0	657	0
Economic Research Service	5,300	5,300	0	0	0	0	0	0	0	0
Foreign Agricultural Service	915	680	0	0	235	0	0	0	0	0
Forest Service	28,435	23,039	43	0	5,140	0	164	0	38	11
Nat'l Agricultural Statistics Svc	1,110	1,110	0	0	0	0	0	0	0	0
Department of Commerce, total	39,235	35,009	288	0	3,846	16	76	0	0	0
Bureau of the Census	1,061	1,061	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	38,174	33,948	288	0	3,846	16	76	0	0	0
Department of Defense, total	1,022,870	313,723	108,924	1,265	558,027	6,070	25,975	558	0	8,328
Department of the Army	178,345	83,179	28,590	100	62,689	352	1,996	6	0	1,433
Department of the Navy	347,214	122,916	27,054	724	171,926	952	18,431	84	0	5,127
Department of the Air Force	188,067	97,079	23,398	333	60,695	522	4,392	0	0	1,648
Defense Agencies, total	309,244	10,549	29,882	108	262,717	4,244	1,156	468	0	120
Ballistic Missile Defense Org	12,131	2,523	5,419	0	3,939	250	0	0	0	0
Defense Adv Rsch Projects Agcy	73,950	3,540	24,463	108	40,531	3,994	1,156	38	0	120
Washington Headquarters Services	223,163	4,486	0	0	218,247	0	0	430	0	0
Department of Education	3,044	143	0	0	1,901	0	1,000	0	0	0
Department of Energy	1,970,861	44,679	69,638	203,144	459,362	1,088,883	26,761	76,186	975	1,233
Dept of Health & Human Svcs, total	6,851,762	1,134,430	285,385	89,774	4,241,826	18,875	995,158	9,335	51,831	25,148
Health Resources & Services Admin	1,053	1,053	0	0	0	0	0	0	0	0
National Institutes of Health	6,850,709	1,133,377	285,385	89,774	4,241,826	18,875	995,158	9,335	51,831	25,148
Department of the Interior, total	56,442	52,428	0	0	3,844	0	120	0	50	0
Geological Survey	55,942	52,312	0	0	3,580	0	0	0	50	0
National Park Service	500	116	0	0	264	0	120	0	0	0
Department of Justice, total	12,400	150	515	0	4,250	0	300	0	7,185	0
Office of Justice Programs	12,400	150	515	0	4,250	0	300	0	7,185	0
Department of Labor, total	11,300	7,300	0	0	4,000	0	0	0	0	0
Bureau of Labor Statistics	11,300	7,300	0	0	4,000	0	0	0	0	0
Department of Transportation, total	37,540	9,577	8,188	0	3,531	5,217	10,215	0	812	0
Federal Highway Administration	37,540	9,577	8,188	0	3,531	5,217	10,215	0	812	0
Department of the Treasury, total	31	31	0	0	0	0	0	0	0	0
Bureau of Engraving & Printing	31	31	0	0	0	0	0	0	0	0
Department of Veterans Affairs	13,575	13,575	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Other agencies:										
Environmental Protection Agency	51,133	26,738	7,716	0	11,532	0	4,891	0	130	126
International Development Cooperation Agency, total	122	15	0	0	1	0	91	0	0	15
Agency for International Development ²	122	15	0	0	1	0	91	0	0	15
Library of Congress	259	259	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,094,767	523,692	615,048	516	519,823	349,802	77,708	1,763	1,278	5,137
National Science Foundation	2,056,713	13,302	66,017	0	1,689,420	131,185	142,645	536	5,471	8,137
Smithsonian Institution	130,000	130,000	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-28. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1998

[Dollars in thousands]

Page 1 of 2

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	15,861,534	2,872,166	1,373,910	323,975	8,066,974	1,584,540	1,400,607	113,177	72,739	53,446
Departments:										
Department of Agriculture, total	598,033	395,009	5,815	0	186,341	0	8,559	0	700	1,609
Agricultural Research Service	373,946	351,633	0	0	18,688	0	2,022	0	5	1,598
Cooperative State Research, Education, & Extension Service	185,297	10,217	5,772	0	162,278	0	6,373	0	657	0
Economic Research Service	7,160	7,160	0	0	0	0	0	0	0	0
Foreign Agricultural Service	915	680	0	0	235	0	0	0	0	0
Forest Service	29,570	24,174	43	0	5,140	0	164	0	38	11
Nat'l Agricultural Statistics Svc	1,145	1,145	0	0	0	0	0	0	0	0
Department of Commerce, total	40,766	36,549	288	0	3,837	16	76	0	0	0
Bureau of the Census	1,131	1,131	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	39,635	35,418	288	0	3,837	16	76	0	0	0
Department of Defense, total	1,015,727	313,301	110,394	814	538,269	7,086	35,319	1,500	0	9,044
Department of the Army	177,783	87,800	27,215	104	58,815	367	1,930	230	0	1,322
Department of the Navy	321,518	113,787	25,040	710	158,748	933	17,140	0	0	5,160
Department of the Air Force	183,887	70,407	18,349	0	77,858	208	15,060	0	0	2,005
Defense Agencies, total	332,539	41,307	39,790	0	242,848	5,578	1,189	1,270	0	557
Ballistic Missile Defense Org	46,936	33,628	10,351	0	2,342	0	240	0	0	375
Defense Adv Rsch Projects Agcy	77,379	5,560	29,439	0	34,841	5,578	949	830	0	182
Washington Headquarters Services	208,224	2,119	0	0	205,665	0	0	440	0	0
Department of Education	5,305	153	0	0	1,952	0	3,200	0	0	0
Department of Energy	2,077,394	58,460	103,839	225,867	451,997	1,095,628	40,652	99,439	452	1,060
Dept of Health & Human Svcs, total	7,360,998	1,218,706	306,597	96,447	4,557,114	20,278	1,069,126	10,029	55,684	27,017
Health Resources & Services Admin	1,087	1,087	0	0	0	0	0	0	0	0
National Institutes of Health	7,359,911	1,217,619	306,597	96,447	4,557,114	20,278	1,069,126	10,029	55,684	27,017
Department of the Interior, total	57,098	52,922	0	0	3,986	0	120	0	70	0
Geological Survey	56,552	52,882	0	0	3,600	0	0	0	70	0
National Park Service	546	40	0	0	386	0	120	0	0	0
Department of Justice, total	18,567	1,000	0	0	8,410	0	2,957	0	6,200	0
Office of Justice Programs	18,567	1,000	0	0	8,410	0	2,957	0	6,200	0
Department of Labor, total	11,100	11,100	0	0	0	0	0	0	0	0
Bureau of Labor Statistics	11,100	11,100	0	0	0	0	0	0	0	0
Department of Transportation, total	59,076	33,842	20,766	0	0	910	1,150	0	2,408	0
Federal Highway Administration	59,076	33,842	20,766	0	0	910	1,150	0	2,408	0
Department of the Treasury, total	23	23	0	0	0	0	0	0	0	0
Bureau of Engraving & Printing	23	23	0	0	0	0	0	0	0	0
Department of Veterans Affairs	14,100	14,100	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-28. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1998

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Other agencies:										
Environmental Protection Agency	57,000	27,215	7,854	0	16,692	0	4,978	0	132	129
International Development Cooperation Agency, total	1,296	166	0	0	6	0	994	0	0	130
Agency for International Development ²	1,296	166	0	0	6	0	994	0	0	130
Library of Congress	209	209	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,245,625	561,407	748,858	847	519,823	322,516	83,305	1,644	1,333	5,892
National Science Foundation	2,165,217	14,004	69,499	0	1,778,547	138,106	150,171	565	5,760	8,565
Smithsonian Institution	134,000	134,000	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-29. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1999

[Dollars in thousands]

Page 1 of 2

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Total, all agencies	16,913,798	3,063,668	1,279,108	335,598	8,763,021	1,754,891	1,476,189	105,312	80,550	55,461
Departments:										
Department of Agriculture, total	608,797	414,771	5,222	0	182,582	0	3,800	0	673	1,749
Agricultural Research Service	390,633	372,484	0	0	15,175	0	1,231	0	5	1,738
Cooperative State Research, Education, & Extension Service	180,960	10,714	5,179	0	162,032	0	2,405	0	630	0
Economic Research Service	5,584	5,584	0	0	0	0	0	0	0	0
Foreign Agricultural Service	915	680	0	0	235	0	0	0	0	0
Forest Service	29,570	24,174	43	0	5,140	0	164	0	38	11
Nat'l Agricultural Statistics Svc	1,135	1,135	0	0	0	0	0	0	0	0
Department of Commerce, total	42,832	38,615	288	0	3,837	16	76	0	0	0
Bureau of the Census	1,889	1,889	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	40,943	36,726	288	0	3,837	16	76	0	0	0
Department of Defense, total	1,106,440	346,666	102,915	1,589	617,901	7,211	21,819	733	0	7,606
Department of the Army	204,069	93,895	32,768	124	73,896	437	2,189	333	0	427
Department of the Navy	361,224	127,870	28,146	760	179,028	999	19,261	0	0	5,160
Department of the Air Force	202,913	91,014	18,675	0	91,803	0	0	0	0	1,421
Defense Agencies, total	338,234	33,887	23,326	705	273,174	5,775	369	400	0	598
Ballistic Missile Defense Org	29,843	20,903	7,601	705	100	240	0	0	0	294
Defense Adv Rsch Projects Agcy	63,849	2,280	15,725	0	39,636	5,535	369	0	0	304
Washington Headquarters Services	244,542	10,704	0	0	233,438	0	0	400	0	0
Department of Education	8,204	237	0	0	4,485	0	3,482	0	0	0
Department of Energy	2,226,637	99,027	123,802	227,965	462,879	1,192,007	28,588	91,249	290	830
Dept of Health & Human Svcs, total	7,977,128	1,320,691	332,261	104,520	4,938,571	21,975	1,158,619	10,868	60,345	29,278
Health Resources & Services Admin	1,150	1,150	0	0	0	0	0	0	0	0
National Institutes of Health	7,975,978	1,319,541	332,261	104,520	4,938,571	21,975	1,158,619	10,868	60,345	29,278
Department of the Interior, total	66,227	62,022	0	0	4,015	0	120	0	70	0
Geological Survey	65,681	61,982	0	0	3,629	0	0	0	70	0
National Park Service	546	40	0	0	386	0	120	0	0	0
Department of Justice, total	25,950	3,000	2,000	0	6,050	0	5,000	0	9,900	0
Office of Justice Programs	25,950	3,000	2,000	0	6,050	0	5,000	0	9,900	0
Department of Labor, total	11,100	11,100	0	0	0	0	0	0	0	0
Bureau of Labor Statistics	11,100	11,100	0	0	0	0	0	0	0	0
Department of Transportation, total	55,788	35,013	13,242	692	0	4,913	623	0	1,305	0
Federal Highway Administration	55,788	35,013	13,242	692	0	4,913	623	0	1,305	0
Department of the Treasury, total	24	24	0	0	0	0	0	0	0	0
Bureau of Engraving & Printing	24	24	0	0	0	0	0	0	0	0
Department of Veterans Affairs	15,500	15,500	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-29. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1999

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Other agencies:										
Environmental Protection Agency	57,000	27,215	7,854	0	16,692	0	4,978	0	132	129
International Development Cooperation Agency, total	1,050	135	0	0	5	0	805	0	0	105
Agency for International Development ²	1,050	135	0	0	5	0	805	0	0	105
Library of Congress	214	214	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,126,566	531,642	613,130	832	519,823	372,987	78,888	1,825	1,338	6,101
National Science Foundation	2,442,341	15,796	78,394	0	2,006,181	155,782	169,391	637	6,497	9,663
Smithsonian Institution	142,000	142,000	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-30. Federal obligations for basic research, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

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Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	14,942,151	15,861,534	16,913,798
Life sciences, total	7,203,755	7,687,579	8,322,165
Biological (excluding environmental)	3,391,000	NA	NA
Environmental biology	206,074	NA	NA
Agricultural	348,074	NA	NA
Medical	3,035,174	NA	NA
Life sciences, n.e.c.	223,433	NA	NA
Psychology, total	293,854	303,924	332,339
Biological aspects	30,202	NA	NA
Social aspects	12,950	NA	NA
Psychological sciences, n.e.c.	250,702	NA	NA
Physical sciences, total	2,976,361	3,126,617	3,304,863
Astronomy	754,176	NA	NA
Chemistry	517,846	NA	NA
Physics	1,561,715	NA	NA
Physical sciences, n.e.c.	142,624	NA	NA
Environmental sciences, total	1,543,481	1,640,918	1,675,467
Atmospheric	679,540	NA	NA
Geological	388,277	NA	NA
Oceanography	303,525	NA	NA
Environmental sciences, n.e.c.	172,139	NA	NA
Mathematics & computer sciences, total	661,382	699,789	786,651
Mathematics	238,247	NA	NA
Computer sciences	389,530	NA	NA
Mathematics & computer sciences, n.e.c.	33,605	NA	NA
Engineering, total	1,582,999	1,696,412	1,712,814
Aeronautical	269,052	NA	NA
Astronautical	69,796	NA	NA
Chemical	68,050	NA	NA
Civil	45,413	NA	NA
Electrical	172,866	NA	NA
Mechanical	104,852	NA	NA
Metallurgy & materials	462,577	NA	NA
Engineering, n.e.c.	390,393	NA	NA
Social sciences, total	221,031	238,530	265,810
Anthropology	14,812	NA	NA
Economics	46,141	NA	NA
Political science	4,894	NA	NA
Sociology	8,156	NA	NA
Social sciences, n.e.c.	147,028	NA	NA
Other sciences, n.e.c.	459,288	467,765	513,689

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
 n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-31. Federal obligations for basic research, by agency and field of science and engineering:
fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	14,942,151	7,203,755	293,854	2,976,361	1,543,481	661,382	1,582,999	221,031	459,288
Departments:									
Department of Agriculture, total	590,097	505,694	36	43,459	4,165	1,821	13,753	20,949	220
Agricultural Research Service	364,442	327,957	0	30,422	2,356	231	3,476	0	0
Cooperative State Research, Education, & Extension Service	189,895	157,043	0	11,167	1,199	0	6,092	14,394	0
Economic Research Service	5,300	0	0	0	0	0	0	5,300	0
Foreign Agricultural Service	915	915	0	0	0	0	0	0	0
Forest Service	28,435	19,779	36	1,870	610	480	4,185	1,255	220
Nat'l Agricultural Statistics Svc	1,110	0	0	0	0	1,110	0	0	0
Department of Commerce, total	39,235	476	201	31,431	291	2,502	4,334	0	0
Bureau of the Census	1,061	0	201	0	0	860	0	0	0
Nat'l Inst of Standards & Tech	38,174	476	0	31,431	291	1,642	4,334	0	0
Department of Defense, total	1,022,870	89,389	28,604	157,229	135,109	139,957	439,879	329	32,374
Department of the Army	178,345	29,551	4,713	30,638	14,701	33,461	64,952	329	0
Department of the Navy	347,214	26,388	19,790	48,608	93,397	31,594	106,258	0	21,179
Department of the Air Force	188,067	13,667	0	43,587	10,727	21,223	90,217	0	8,646
Defense Agencies, total	309,244	19,783	4,101	34,396	16,284	53,679	178,452	0	2,549
Ballistic Missile Defense Org	12,131	0	0	1,110	0	0	11,021	0	0
Defense Adv Rsch Projects Agcy	73,950	2,065	0	373	0	21,151	47,812	0	2,549
Washington Headquarters Services	223,163	17,718	4,101	32,913	16,284	32,528	119,619	0	0
Department of Education	3,044	0	0	0	0	0	0	3,044	0
Department of Energy	1,970,861	168,598	0	1,192,381	201,547	112,246	294,487	0	1,602
Dept of Health & Human Svcs, total	6,851,762	5,948,944	254,934	108,504	20,947	61,658	99,155	63,512	294,108
Health Resources & Services Admin	1,053	1,053	0	0	0	0	0	0	0
National Institutes of Health	6,850,709	5,947,891	254,934	108,504	20,947	61,658	99,155	63,512	294,108
Department of the Interior, total	56,442	10,999	0	500	44,943	0	0	0	0
Geological Survey	55,942	10,999	0	0	44,943	0	0	0	0
National Park Service	500	0	0	500	0	0	0	0	0
Department of Justice, total	12,400	1,000	600	0	0	0	0	9,650	1,150
Office of Justice Programs	12,400	1,000	600	0	0	0	0	9,650	1,150
Department of Labor, total	11,300	0	0	0	0	0	0	11,300	0
Bureau of Labor Statistics	11,300	0	0	0	0	0	0	11,300	0
Department of Transportation, total	37,540	0	0	273	6	665	33,465	166	2,965
Federal Highway Administration	37,540	0	0	273	6	665	33,465	166	2,965
Department of the Treasury, total	31	0	0	31	0	0	0	0	0
Bureau of Engraving & Printing	31	0	0	31	0	0	0	0	0
Department of Veterans Affairs	13,575	13,031	544	0	0	0	0	0	0
Other agencies:									
Environmental Protection Agency	51,133	14,136	0	0	21,881	0	15,116	0	0
International Development Cooperation Agency, total	122	122	0	0	0	0	0	0	0
Agency for International Development ¹	122	122	0	0	0	0	0	0	0
Library of Congress	259	0	0	0	0	0	0	0	259
National Aeronautics & Space Admin	2,094,767	81,771	3,754	940,254	668,335	24,408	354,450	386	21,409
National Science Foundation	2,056,713	320,123	5,181	464,095	440,269	318,125	328,360	77,101	103,459
Smithsonian Institution	130,000	49,472	0	38,204	5,988	0	0	34,594	1,742

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-32. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	15,861,534	7,687,579	303,924	3,126,617	1,640,918	699,789	1,696,412	238,530	467,765
Departments:									
Department of Agriculture, total	598,033	511,501	38	43,441	3,593	2,244	14,209	22,778	229
Agricultural Research Service	373,946	337,279	0	30,492	1,747	596	3,832	0	0
Cooperative State Research, Education, & Extension Service	185,297	152,713	0	11,007	1,212	0	6,043	14,322	0
Economic Research Service	7,160	0	0	0	0	0	0	7,160	0
Foreign Agricultural Service	915	915	0	0	0	0	0	0	0
Forest Service	29,570	20,594	38	1,942	634	503	4,334	1,296	229
Nat'l Agricultural Statistics Svc	1,145	0	0	0	0	1,145	0	0	0
Department of Commerce, total	40,766	494	214	32,634	302	2,622	4,500	0	0
Bureau of the Census	1,131	0	214	0	0	917	0	0	0
Nat'l Inst of Standards & Tech	39,635	494	0	32,634	302	1,705	4,500	0	0
Department of Defense, total	1,015,727	84,695	19,307	172,184	135,747	142,620	449,689	0	11,485
Department of the Army	177,783	27,998	3,440	31,334	15,886	35,256	63,687	0	182
Department of the Navy	321,518	24,789	15,594	62,278	101,407	28,422	89,028	0	0
Department of the Air Force	183,887	17,022	0	45,732	6,329	31,009	72,492	0	11,303
Defense Agencies, total	332,539	14,886	273	32,840	12,125	47,933	224,482	0	0
Ballistic Missile Defense Org	46,936	0	0	4,380	0	0	42,556	0	0
Defense Adv Rsch Projects Agcy	77,379	1,792	0	219	0	19,094	56,274	0	0
Washington Headquarters Services	208,224	13,094	273	28,241	12,125	28,839	125,652	0	0
Department of Education	5,305	0	0	0	0	0	0	5,305	0
Department of Energy	2,077,394	183,985	0	1,253,243	221,138	125,407	292,176	0	1,445
Dept of Health & Human Svcs, total	7,360,998	6,391,065	273,892	116,566	22,507	66,239	106,527	68,234	315,968
Health Resources & Services Admin	1,087	1,087	0	0	0	0	0	0	0
National Institutes of Health	7,359,911	6,389,978	273,892	116,566	22,507	66,239	106,527	68,234	315,968
Department of the Interior, total	57,098	11,612	0	546	44,940	0	0	0	0
Geological Survey	56,552	11,612	0	0	44,940	0	0	0	0
National Park Service	546	0	0	546	0	0	0	0	0
Department of Justice, total	18,567	2,500	700	0	0	0	0	14,117	1,250
Office of Justice Programs	18,567	2,500	700	0	0	0	0	14,117	1,250
Department of Labor, total	11,100	0	0	0	0	0	0	11,100	0
Bureau of Labor Statistics	11,100	0	0	0	0	0	0	11,100	0
Department of Transportation, total	59,076	0	0	884	3	1,341	52,096	125	4,627
Federal Highway Administration	59,076	0	0	884	3	1,341	52,096	125	4,627
Department of the Treasury, total	23	0	0	23	0	0	0	0	0
Bureau of Engraving & Printing	23	0	0	23	0	0	0	0	0
Department of Veterans Affairs	14,100	13,535	565	0	0	0	0	0	0
Other agencies:									
Environmental Protection Agency	57,000	15,767	0	0	24,386	0	16,847	0	0
International Development Cooperation Agency, total	1,296	1,274	0	0	0	0	0	0	22
Agency for International Development ¹	1,296	1,274	0	0	0	0	0	0	22
Library of Congress	209	0	0	0	0	0	0	0	209
National Aeronautics & Space Admin	2,245,625	81,821	3,754	980,348	718,385	24,408	414,686	386	21,837
National Science Foundation	2,165,217	337,011	5,454	488,579	463,496	334,908	345,682	81,169	108,918
Smithsonian Institution	134,000	52,319	0	38,169	6,421	0	0	35,316	1,775

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-33. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	16,913,798	8,322,165	332,339	3,304,863	1,675,467	786,651	1,712,814	265,810	513,689
Departments:									
Department of Agriculture, total	608,797	525,580	38	44,115	3,457	2,261	13,255	19,862	229
Agricultural Research Service	390,633	352,329	0	31,853	1,825	623	4,003	0	0
Cooperative State Research, Education, & Extension Service	180,960	151,742	0	10,320	998	0	4,918	12,982	0
Economic Research Service	5,584	0	0	0	0	0	0	5,584	0
Foreign Agricultural Service	915	915	0	0	0	0	0	0	0
Forest Service	29,570	20,594	38	1,942	634	503	4,334	1,296	229
Nat'l Agricultural Statistics Svc	1,135	0	0	0	0	1,135	0	0	0
Department of Commerce, total	42,832	510	363	33,711	312	3,287	4,649	0	0
Bureau of the Census	1,889	0	363	0	0	1,526	0	0	0
Nat'l Inst of Standards & Tech	40,943	510	0	33,711	312	1,761	4,649	0	0
Department of Defense, total	1,106,440	120,487	23,892	177,557	147,279	165,936	452,689	0	18,600
Department of the Army	204,069	34,777	5,530	34,702	16,970	39,776	71,972	0	342
Department of the Navy	361,224	27,850	17,520	69,969	113,930	31,932	100,023	0	0
Department of the Air Force	202,913	14,999	0	42,310	6,011	38,293	83,042	0	18,258
Defense Agencies, total	338,234	42,861	842	30,576	10,368	55,935	197,652	0	0
Ballistic Missile Defense Org	29,843	0	0	1,335	0	0	28,508	0	0
Defense Adv Rsch Projects Agcy	63,849	0	0	0	0	24,185	39,664	0	0
Washington Headquarters Services	244,542	42,861	842	29,241	10,368	31,750	129,480	0	0
Department of Education	8,204	0	0	0	0	0	0	8,204	0
Department of Energy	2,226,637	186,962	0	1,358,356	224,576	140,266	315,477	0	1,000
Dept of Health & Human Svcs, total	7,977,128	6,926,005	296,818	126,324	24,391	71,784	115,444	73,945	342,417
Health Resources & Services Admin	1,150	1,150	0	0	0	0	0	0	0
National Institutes of Health	7,975,978	6,924,855	296,818	126,324	24,391	71,784	115,444	73,945	342,417
Department of the Interior, total	66,227	12,585	0	546	53,096	0	0	0	0
Geological Survey	65,681	12,585	0	0	53,096	0	0	0	0
National Park Service	546	0	0	546	0	0	0	0	0
Department of Justice, total	25,950	1,000	700	0	0	0	0	23,200	1,050
Office of Justice Programs	25,950	1,000	700	0	0	0	0	23,200	1,050
Department of Labor, total	11,100	0	0	0	0	0	0	11,100	0
Bureau of Labor Statistics	11,100	0	0	0	0	0	0	11,100	0
Department of Transportation, total	55,788	0	0	618	13	937	50,077	132	4,011
Federal Highway Administration	55,788	0	0	618	13	937	50,077	132	4,011
Department of the Treasury, total	24	0	0	24	0	0	0	0	0
Bureau of Engraving & Printing	24	0	0	24	0	0	0	0	0
Department of Veterans Affairs	15,500	14,879	621	0	0	0	0	0	0
Other agencies:									
Environmental Protection Agency	57,000	15,767	0	0	24,386	0	16,847	0	0
International Development Cooperation Agency, total	1,050	1,032	0	0	0	0	0	0	18
Agency for International Development ¹	1,050	1,032	0	0	0	0	0	0	18
Library of Congress	214	0	0	0	0	0	0	0	214
National Aeronautics & Space Admin	2,126,566	81,771	3,754	972,053	668,335	24,408	354,450	386	21,409
National Science Foundation	2,442,341	380,145	6,153	551,112	522,818	377,772	389,926	91,557	122,858
Smithsonian Institution	142,000	55,442	0	40,447	6,804	0	0	37,424	1,883

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

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KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-34. Federal obligations for basic research in psychology and life sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Psychology				Life sciences					
	Total	Bio-logical aspects	Social aspects	Psycho-logical sciences, n.e.c.	Total	Biological	Environ-mental biology	Agri-cultural	Medical	Life sciences, n.e.c.
Total, all agencies	293,854	30,202	12,950	250,702	7,203,755	3,391,000	206,074	348,074	3,035,174	223,433
Departments:										
Department of Agriculture, total	36	0	36	0	505,694	84,882	60,305	347,439	13,068	0
Agricultural Research Service	0	0	0	0	327,957	30,911	26,109	263,847	7,090	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	157,043	48,521	21,796	82,267	4,459	0
Foreign Agricultural Service	0	0	0	0	915	0	0	915	0	0
Forest Service	36	0	36	0	19,779	5,450	12,400	410	1,519	0
Department of Commerce, total	201	0	0	201	476	476	0	0	0	0
Bureau of the Census	201	0	0	201	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	0	0	0	0	476	476	0	0	0	0
Department of Defense, total	28,604	21,778	2,848	3,978	89,389	34,056	14,763	0	37,131	3,439
Department of the Army	4,713	0	2,471	2,242	29,551	4,116	0	0	21,996	3,439
Department of the Navy	19,790	18,054	0	1,736	26,388	10,416	8,333	0	7,639	0
Department of the Air Force	0	0	0	0	13,667	7,237	6,430	0	0	0
Defense Agencies, total	4,101	3,724	377	0	19,783	12,287	0	0	7,496	0
Defense Adv Rsch Projects Agcy	0	0	0	0	2,065	626	0	0	1,439	0
Washington Headquarters Services	4,101	3,724	377	0	17,718	11,661	0	0	6,057	0
Department of Energy	0	0	0	0	168,598	162,701	1,000	0	0	4,897
Dept of Health & Human Svcs, total	254,934	7,808	3,847	243,279	5,948,944	2,781,408	53	0	2,967,638	199,845
Health Resources & Services Admin	0	0	0	0	1,053	0	0	0	1,053	0
National Institutes of Health	254,934	7,808	3,847	243,279	5,947,891	2,781,408	53	0	2,966,585	199,845
Department of the Interior, total	0	0	0	0	10,999	5,829	5,170	0	0	0
Geological Survey	0	0	0	0	10,999	5,829	5,170	0	0	0
Department of Justice, total	600	0	600	0	1,000	500	0	0	0	500
Office of Justice Programs	600	0	600	0	1,000	500	0	0	0	500
Department of Veterans Affairs	544	544	0	0	13,031	6,046	0	0	6,985	0
Other agencies:										
Environmental Protection Agency	0	0	0	0	14,136	0	11,455	0	2,681	0
International Development Cooperation Agency, total	0	0	0	0	122	0	0	0	0	122
Agency for International Development ¹	0	0	0	0	122	0	0	0	0	122
National Aeronautics & Space Admin	3,754	72	438	3,244	81,771	54,571	4,264	635	7,671	14,630
National Science Foundation	5,181	0	5,181	0	320,123	239,185	80,938	0	0	0
Smithsonian Institution	0	0	0	0	49,472	21,346	28,126	0	0	0

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

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KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-35. Federal obligations for basic research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	2,976,361	754,176	517,846	1,561,715	142,624	1,543,481	679,540	388,277	303,525	172,139
Departments:										
Department of Agriculture, total	43,459	0	42,035	1,424	0	4,165	4,007	158	0	0
Agricultural Research Service	30,422	0	29,278	1,144	0	2,356	2,291	65	0	0
Cooperative State Research, Education, & Extension Service	11,167	0	11,167	0	0	1,199	1,199	0	0	0
Forest Service	1,870	0	1,590	280	0	610	517	93	0	0
Department of Commerce, total	31,431	338	11,804	19,289	0	291	0	291	0	0
Nat'l Inst of Standards & Tech	31,431	338	11,804	19,289	0	291	0	291	0	0
Department of Defense, total	157,229	1,904	68,557	72,887	13,881	135,109	35,006	9,330	62,574	28,199
Department of the Army	30,638	0	10,392	16,667	3,579	14,701	5,866	2,163	0	6,672
Department of the Navy	48,608	0	26,387	13,888	8,333	93,397	15,277	5,208	51,385	21,527
Department of the Air Force	43,587	1,904	19,480	21,344	859	10,727	10,727	0	0	0
Defense Agencies, total	34,396	0	12,298	20,988	1,110	16,284	3,136	1,959	11,189	0
Ballistic Missile Defense Org	1,110	0	0	0	1,110	0	0	0	0	0
Defense Adv Rsch Projects Agcy	373	0	373	0	0	0	0	0	0	0
Washington Headquarters Services	32,913	0	11,925	20,988	0	16,284	3,136	1,959	11,189	0
Department of Energy	1,192,381	0	130,414	1,059,170	2,797	201,547	88,941	57,374	7,095	48,137
Dept of Health & Human Svcs, total	108,504	0	96,324	12,180	0	20,947	0	0	0	20,947
National Institutes of Health	108,504	0	96,324	12,180	0	20,947	0	0	0	20,947
Department of the Interior, total	500	0	500	0	0	44,943	0	44,943	0	0
Geological Survey	0	0	0	0	0	44,943	0	44,943	0	0
National Park Service	500	0	500	0	0	0	0	0	0	0
Department of Transportation, total	273	10	0	0	263	6	0	0	0	6
Federal Highway Administration	273	10	0	0	263	6	0	0	0	6
Department of the Treasury, total	31	0	0	0	31	0	0	0	0	0
Bureau of Engraving & Printing	31	0	0	0	31	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	0	0	0	0	0	21,881	10,204	1,424	0	10,253
National Aeronautics & Space Admin	940,254	600,773	43,257	269,495	26,729	668,335	411,018	172,388	36,096	48,833
National Science Foundation	464,095	115,199	124,245	125,728	98,923	440,269	130,275	96,863	197,367	15,764
Smithsonian Institution	38,204	35,952	710	1,542	0	5,988	89	5,506	393	0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-36. Federal obligations for basic research in engineering, by agency and detailed field of engineering: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	1,582,999	269,052	69,796	68,050	45,413	172,866	104,852	462,577	390,393
Departments:									
Department of Agriculture, total	13,753	0	0	2,510	661	372	410	0	9,800
Agricultural Research Service	3,476	0	0	1,920	381	367	200	0	608
Cooperative State Research, Education, & Extension Service	6,092	0	0	0	0	0	0	0	6,092
Forest Service	4,185	0	0	590	280	5	210	0	3,100
Department of Commerce, total	4,334	0	0	1,203	541	235	605	1,248	502
Nat'l Inst of Standards & Tech	4,334	0	0	1,203	541	235	605	1,248	502
Department of Defense, total	439,879	19,577	8,967	9,084	7,708	123,804	70,658	100,202	99,879
Department of the Army	64,952	10,189	0	2,317	6,827	21,934	10,858	11,810	1,017
Department of the Navy	106,258	0	0	0	0	38,208	23,609	24,998	19,443
Department of the Air Force	90,217	3,799	2,893	0	0	16,509	9,319	8,410	49,287
Defense Agencies, total	178,452	5,589	6,074	6,767	881	47,153	26,872	54,984	30,132
Ballistic Missile Defense Org	11,021	2,558	2,550	2,481	0	3,432	0	0	0
Defense Adv Rsch Projects Agcy	47,812	0	0	9	0	2,223	0	20,967	24,613
Washington Headquarters Services	119,619	3,031	3,524	4,277	881	41,498	26,872	34,017	5,519
Department of Energy	294,487	0	1,600	23,443	14	0	16,472	241,837	11,121
Dept of Health & Human Svcs, total	99,155	0	0	0	0	0	0	0	99,155
National Institutes of Health	99,155	0	0	0	0	0	0	0	99,155
Department of Transportation, total	33,465	0	0	0	7,668	65	33	0	25,699
Federal Highway Administration	33,465	0	0	0	7,668	65	33	0	25,699
Other agencies:									
Environmental Protection Agency	15,116	0	0	333	0	0	0	0	14,783
National Aeronautics & Space Admin	354,450	249,475	59,229	2,552	169	6,799	10,421	15,667	10,138
National Science Foundation	328,360	0	0	28,925	28,652	41,591	6,253	103,623	119,316

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-37. Federal obligations for basic research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Total, all agencies	661,382	238,247	389,530	33,605	221,031	14,812	46,141	4,894	8,156	147,028
Departments:										
Department of Agriculture, total	1,821	1,821	0	0	20,949	35	18,235	0	2,679	0
Agricultural Research Service	231	231	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	14,394	0	11,835	0	2,559	0
Economic Research Service	0	0	0	0	5,300	0	5,300	0	0	0
Forest Service	480	480	0	0	1,255	35	1,100	0	120	0
Nat'l Agricultural Statistics Svc	1,110	1,110	0	0	0	0	0	0	0	0
Department of Commerce, total	2,502	0	1,642	860	0	0	0	0	0	0
Bureau of the Census	860	0	0	860	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	1,642	0	1,642	0	0	0	0	0	0	0
Department of Defense, total	139,957	28,486	89,164	22,307	329	0	0	0	0	329
Department of the Army	33,461	5,208	27,614	639	329	0	0	0	0	329
Department of the Navy	31,594	14,581	17,013	0	0	0	0	0	0	0
Department of the Air Force	21,223	1,674	692	18,857	0	0	0	0	0	0
Defense Agencies, total	53,679	7,023	43,845	2,811	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	21,151	0	21,151	0	0	0	0	0	0	0
Washington Headquarters Services	32,528	7,023	22,694	2,811	0	0	0	0	0	0
Department of Education	0	0	0	0	3,044	0	0	0	0	3,044
Department of Energy	112,246	86,759	19,612	5,875	0	0	0	0	0	0
Dept of Health & Human Svcs, total	61,658	28,721	32,937	0	63,512	0	0	0	157	63,355
National Institutes of Health	61,658	28,721	32,937	0	63,512	0	0	0	157	63,355
Department of Justice, total	0	0	0	0	9,650	0	0	0	0	9,650
Office of Justice Programs	0	0	0	0	9,650	0	0	0	0	9,650
Department of Labor, total	0	0	0	0	11,300	0	11,300	0	0	0
Bureau of Labor Statistics	0	0	0	0	11,300	0	11,300	0	0	0
Department of Transportation, total	665	40	541	84	166	0	0	0	0	166
Federal Highway Administration	665	40	541	84	166	0	0	0	0	166
Other agencies:										
National Aeronautics & Space Admin	24,408	791	19,138	4,479	386	0	0	0	247	139
National Science Foundation	318,125	91,629	226,496	0	77,101	11,120	16,606	4,894	4,562	39,919
Smithsonian Institution	0	0	0	0	34,594	3,657	0	0	511	30,426

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Total, all agencies	14,423,436	4,978,650	3,225,452	464,902	3,477,408	998,824	1,005,299	129,171	75,524	68,206
Departments:										
Department of Agriculture, total	700,009	438,885	6,160	0	242,182	0	9,985	0	1,438	1,359
Agricultural Marketing Service	4,171	3,990	0	0	181	0	0	0	0	0
Agricultural Research Service	261,298	246,500	0	0	12,022	0	1,477	0	4	1,295
Cooperative State Research, Education, & Extension Service	243,630	12,450	6,048	0	218,538	0	5,870	0	724	0
Economic Research Service	47,703	46,369	0	0	1,334	0	0	0	0	0
Foreign Agricultural Service	507	218	0	0	289	0	0	0	0	0
Forest Service	137,420	125,568	112	0	9,683	0	1,283	0	710	64
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,262	2,072	0	0	135	0	55	0	0	0
Rural Business-Cooperative Svc	2,468	1,168	0	0	0	0	1,300	0	0	0
Department of Commerce, total	768,823	568,526	119,558	0	75,878	28	4,073	0	365	395
Bureau of the Census	2,352	2,352	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	163	0	195	0	142	0	0	0
Nat'l Inst of Standards & Tech	293,277	171,086	111,600	0	8,221	3	1,972	0	0	395
Nat'l Oceanic & Atmospheric Admin	468,803	391,197	7,795	0	67,462	25	1,959	0	365	0
National Telecommunications & Information Administration	3,841	3,841	0	0	0	0	0	0	0	0
Department of Defense, total	2,786,947	1,065,041	1,162,070	12,225	387,425	65,195	69,665	14,933	686	9,707
Department of the Army	531,682	329,510	147,949	615	37,835	540	11,574	914	56	2,689
Department of the Navy	538,520	247,664	212,824	2,375	59,825	3,976	9,888	804	0	1,164
Department of the Air Force	628,519	352,825	240,650	243	19,739	67	10,216	4,352	0	427
Defense Agencies, total	1,088,226	135,042	560,647	8,992	270,026	60,612	37,987	8,863	630	5,427
Ballistic Missile Defense Org	92,614	13,995	63,142	70	3,281	9,663	432	678	630	723
Defense Adv Rsch Projects Agcy	700,874	48,649	350,760	3,984	219,190	32,051	35,798	8,185	0	2,257
Defense Info Systems Agcy	1,871	1,871	0	0	0	0	0	0	0	0
Defense Logistics Agency	7,041	7,041	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	199,624	43,551	134,201	4,938	8,632	4,349	1,506	0	0	2,447
Special Operations Command	16,138	5,030	10,644	0	464	0	0	0	0	0
Washington Headquarters Services	70,064	14,905	1,900	0	38,459	14,549	251	0	0	0
Department of Education	135,033	6,666	3,791	0	97,988	0	25,878	0	710	0
Department of Energy	1,596,836	123,398	103,335	383,410	92,851	783,342	22,272	86,401	1,463	364
Dept of Health & Human Svcs, total	4,376,290	1,171,569	268,863	48,025	2,188,682	16,328	608,483	7,513	50,533	16,294
Administration on Aging	175	85	0	0	90	0	0	0	0	0
Admin for Children & Families	17,380	1,251	1,874	0	10,191	0	3,867	0	197	0
Agcy for Hlth Care Policy & Rsch	134,067	35,005	35,133	0	39,782	0	23,897	0	0	250
Centers for Disease Control & Prevention	322,990	236,970	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	158,601	138,509	3,439	0	11,177	0	5,476	0	0	0
Health Care Financing Admin	43,601	64	28,356	0	5,754	0	6,235	0	2,898	294
Health Resources & Services Admin	12,083	1,561	0	0	8,016	0	2,506	0	0	0
National Institutes of Health	3,668,966	744,417	177,897	48,025	2,066,746	9,326	559,997	7,513	39,295	15,750
Office of the Secretary, total	18,427	13,707	739	0	2,625	0	1,004	0	352	0
Office of the Asst Secretary, Planning & Evaluation	18,427	13,707	739	0	2,625	0	1,004	0	352	0

See explanatory information, if any, and SOURCE at end of table.

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by in-dustrial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti-tutions	FFRDCs admin by non-profit insti-tutions	State and local govts	
Dept of Housing & Urban Development ...	11,265	5,576	1,927	0	1,369	0	2,393	0	0	0
Department of the Interior, total	496,213	441,220	10,918	0	36,865	0	1,168	0	4,815	1,227
Bureau of Reclamation	5,393	4,251	0	0	849	0	293	0	0	0
Geological Survey	444,777	416,506	2,914	0	20,783	0	0	0	4,574	0
Minerals Management Service	20,592	6,306	6,703	0	5,784	0	331	0	241	1,227
National Park Service	25,451	14,157	1,301	0	9,449	0	544	0	0	0
Department of Justice, total	20,085	4,396	5,980	0	7,038	0	2,153	0	518	0
Bureau of Prisons	1,900	1,900	0	0	0	0	0	0	0	0
Drug Enforcement Administration ²	1	1	0	0	0	0	0	0	0	0
Immigration & Naturalization Service ³	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	17,784	2,455	5,980	0	7,038	0	1,793	0	518	0
Department of Labor, total	10,447	4,594	5,412	0	441	0	0	0	0	0
Bureau of Labor Statistics	1,300	1,300	0	0	0	0	0	0	0	0
Employment & Training Admin	1,503	805	373	0	325	0	0	0	0	0
Occupational Safety & Hlth Admin	5,461	1,567	3,894	0	0	0	0	0	0	0
Office of the Secretary	109	25	0	0	84	0	0	0	0	0
Pension Benefit Guaranty Corp	54	54	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,020	843	1,145	0	32	0	0	0	0	0
Department of State	976	313	648	0	15	0	0	0	0	0
Department of Transportation, total	343,665	132,334	127,896	1,905	40,932	0	23,202	5,590	11,060	746
Coast Guard	5,733	3,908	1,325	0	500	0	0	0	0	0
Federal Aviation Administration	159,443	63,757	70,076	1,905	18,115	0	0	5,590	0	0
Federal Highway Administration	111,630	27,016	43,712	0	14,015	0	15,537	0	10,774	576
Federal Railroad Administration	18,235	10,059	2,803	0	550	0	4,484	0	200	139
Federal Transit Administration	5,954	909	200	0	2,400	0	2,359	0	86	0
National Highway Traffic Safety Administration	36,397	23,373	6,819	0	5,352	0	822	0	0	31
Research & Special Programs Admin ..	6,273	3,312	2,961	0	0	0	0	0	0	0
Department of the Treasury, total	50,830	33,738	6,994	0	0	98	0	10,000	0	0
Bureau of Engraving & Printing	1,574	1,476	0	0	0	98	0	0	0	0
Internal Revenue Service	47,864	31,279	6,585	0	0	0	0	10,000	0	0
Office of Thrift Supervision	638	638	0	0	0	0	0	0	0	0
United States Customs Service ⁴	380	50	330	0	0	0	0	0	0	0
United States Secret Service	374	295	79	0	0	0	0	0	0	0
Department of Veterans Affairs	217,406	217,406	0	0	0	0	0	0	0	0
Other agencies:										
Appalachian Regional Commission	900	100	100	0	700	0	0	0	0	0
Consumer Product Safety Commission ...	78	60	18	0	0	0	0	0	0	0
Environmental Protection Agency	357,976	187,162	54,015	0	80,772	0	34,238	0	908	881
Federal Communications Commission	3,099	3,099	0	0	0	0	0	0	0	0
Federal Trade Commission	696	696	0	0	0	0	0	0	0	0
International Development Cooperation Agency, total	176,542	19,745	10,453	0	12,776	0	112,662	0	0	20,906
Agency for International Development ⁵	176,542	19,745	10,453	0	12,776	0	112,662	0	0	20,906
Library of Congress	537	537	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,090,120	522,530	1,279,213	815	76,267	119,461	77,536	2,328	456	11,514
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	191,807	386	48,371	0	129,693	75	11,007	5	432	1,838
Nuclear Regulatory Commission	62,102	15,238	3,094	18,522	5,104	14,297	471	2,401	0	2,975
Social Security Administration	13,618	4,974	5,961	0	430	0	113	0	2,140	0
Tennessee Valley Authority ⁶	3,987	3,987	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
US Arms Control & Disarmament Agency	1,200	525	675	0	0	0	0	0	0	0
United States Information Agency	152	152	0	0	0	0	0	0	0	0
US International Trade Commission	5,677	5,677	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-39. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1998**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Total, all agencies	15,608,973	5,378,401	3,630,469	479,774	3,748,146	1,080,809	1,025,587	104,220	96,060	65,507
Departments:										
Department of Agriculture, total	741,318	462,125	7,384	0	263,117	0	5,993	0	1,437	1,262
Agricultural Marketing Service	4,098	4,098	0	0	0	0	0	0	0	0
Agricultural Research Service	280,459	263,725	0	0	14,016	0	1,516	0	4	1,198
Cooperative State Research, Education, & Extension Service	243,490	13,145	7,272	0	220,486	0	1,864	0	723	0
Economic Research Service	64,444	45,976	0	0	18,468	0	0	0	0	0
Foreign Agricultural Service	507	218	0	0	289	0	0	0	0	0
Forest Service	142,918	131,066	112	0	9,683	0	1,283	0	710	64
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,336	2,131	0	0	175	0	30	0	0	0
Rural Business-Cooperative Svc	2,516	1,216	0	0	0	0	1,300	0	0	0
Department of Commerce, total	784,870	606,387	88,897	0	85,272	3	3,741	0	216	354
Bureau of the Census	2,509	2,509	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	400	0	0	0	100	0	0	0
Nat'l Inst of Standards & Tech	265,500	169,884	81,603	0	11,903	3	1,753	0	0	354
Nat'l Oceanic & Atmospheric Admin	512,647	430,280	6,894	0	73,369	0	1,888	0	216	0
National Telecommunications & Information Administration	3,664	3,664	0	0	0	0	0	0	0	0
Department of Defense, total	2,863,941	1,042,403	1,270,815	16,793	394,887	62,689	51,572	13,145	691	10,946
Department of the Army	677,954	349,061	247,888	4,763	59,320	212	11,372	1,909	74	3,355
Department of the Navy	509,654	233,578	200,812	2,289	56,484	3,832	9,345	2,145	0	1,169
Department of the Air Force	554,550	315,887	224,870	251	11,387	105	757	844	0	449
Defense Agencies, total	1,121,783	143,877	597,245	9,490	267,696	58,540	30,098	8,247	617	5,973
Ballistic Missile Defense Org	100,944	14,925	71,258	618	3,030	9,247	100	442	617	707
Defense Adv Rsch Projects Agcy	770,722	63,023	392,726	4,113	235,648	36,093	28,028	7,783	0	3,308
Defense Info Systems Agcy	1,630	1,630	0	0	0	0	0	0	0	0
Defense Logistics Agency	8,016	8,016	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	170,178	40,142	116,839	4,759	1,512	3,171	1,775	22	0	1,958
Special Operations Command	19,947	5,984	13,518	0	445	0	0	0	0	0
Washington Headquarters Services	50,346	10,157	2,904	0	27,061	10,029	195	0	0	0
Department of Education	149,907	7,127	5,005	0	104,117	0	32,934	0	724	0
Department of Energy	1,671,041	170,352	95,198	396,798	97,544	817,275	18,589	73,607	1,177	501
Dept of Health & Human Svcs, total	4,690,843	1,257,354	287,723	51,541	2,342,668	17,011	652,076	8,063	56,984	17,423
Administration on Aging	2,385	85	0	0	200	0	100	0	2,000	0
Admin for Children & Families	20,083	783	2,123	0	12,545	0	4,439	0	193	0
Agcy for Hlth Care Policy & Rsch	136,859	40,317	34,665	0	38,517	0	23,110	0	0	250
Centers for Disease Control & Prevention	358,457	272,437	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	159,090	138,890	3,500	0	11,200	0	5,500	0	0	0
Health Care Financing Admin	50,000	50	32,590	0	6,607	0	7,154	0	3,329	270
Health Resources & Services Admin ...	12,447	1,610	0	0	8,256	0	2,581	0	0	0
National Institutes of Health	3,937,522	798,882	190,920	51,541	2,218,042	10,009	600,991	8,063	42,171	16,903
Office of the Secretary, total	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0
Office of the Asst Secretary, Planning & Evaluation	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-39. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1998**

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Dept of Housing & Urban Development ...	14,122	6,990	2,415	0	1,723	0	2,994	0	0	0
Department of the Interior, total	526,121	463,007	13,572	0	41,373	0	973	0	5,718	1,478
Bureau of Reclamation	6,755	5,626	0	0	1,000	0	129	0	0	0
Geological Survey	460,958	430,502	4,352	0	20,820	0	0	0	5,284	0
Minerals Management Service	25,430	6,773	7,519	0	8,926	0	300	0	434	1,478
National Park Service	32,978	20,106	1,701	0	10,627	0	544	0	0	0
Department of Justice, total	26,270	3,840	1,646	0	9,617	0	7,854	0	3,313	0
Bureau of Prisons	3,213	1,900	0	0	0	0	0	0	1,313	0
Immigration & Naturalization Service ²	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	22,657	1,900	1,646	0	9,617	0	7,494	0	2,000	0
Department of Labor, total	9,535	4,286	4,573	0	175	0	501	0	0	0
Bureau of Labor Statistics	1,300	1,300	0	0	0	0	0	0	0	0
Employment & Training Admin	1,565	394	570	0	100	0	501	0	0	0
Occupational Safety & Hlth Admin	4,495	1,615	2,880	0	0	0	0	0	0	0
Office of the Secretary	100	25	0	0	75	0	0	0	0	0
Pension Benefit Guaranty Corp	55	55	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,020	897	1,123	0	0	0	0	0	0	0
Department of State	976	313	648	0	0	15	0	0	0	0
Department of Transportation, total	417,601	166,502	165,113	0	49,637	1,349	14,411	5,444	14,938	207
Coast Guard	5,626	3,835	1,391	0	400	0	0	0	0	0
Federal Aviation Administration	150,774	51,481	75,849	0	18,000	0	0	5,444	0	0
Federal Highway Administration	185,228	69,355	70,284	0	22,300	1,349	7,002	0	14,938	0
Federal Railroad Administration	19,335	9,781	5,361	0	368	0	3,660	0	0	165
Federal Transit Administration	6,246	946	0	0	2,400	0	2,900	0	0	0
National Highway Traffic Safety Administration	42,439	27,316	8,063	0	6,169	0	849	0	0	42
Research & Special Programs Admin ..	7,953	3,788	4,165	0	0	0	0	0	0	0
Department of the Treasury, total	62,649	40,410	22,143	0	0	96	0	0	0	0
Bureau of Engraving & Printing	1,784	1,688	0	0	0	96	0	0	0	0
Internal Revenue Service	58,948	37,665	21,283	0	0	0	0	0	0	0
Office of Thrift Supervision	720	720	0	0	0	0	0	0	0	0
United States Customs Service ³	600	60	540	0	0	0	0	0	0	0
United States Secret Service	597	277	320	0	0	0	0	0	0	0
Department of Veterans Affairs	262,509	262,509	0	0	0	0	0	0	0	0
Other agencies:										
Appalachian Regional Commission	900	50	340	0	100	0	255	0	155	0
Consumer Product Safety Commission ...	206	206	0	0	0	0	0	0	0	0
Environmental Protection Agency	450,000	214,854	62,007	0	131,781	0	39,304	0	1,042	1,012
Federal Communications Commission	3,462	3,462	0	0	0	0	0	0	0	0
Federal Trade Commission	1,287	1,287	0	0	0	0	0	0	0	0
International Development Cooperation Agency, total	141,405	15,961	8,050	0	10,500	0	90,583	0	0	16,311
Agency for International Development ⁴	141,405	15,961	8,050	0	10,500	0	90,583	0	0	16,311
Library of Congress	462	462	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,483,595	620,899	1,506,410	815	76,267	171,844	92,132	2,480	507	12,241
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	191,712	385	48,347	0	129,629	75	11,001	5	432	1,838
Nuclear Regulatory Commission	50,677	13,991	3,539	13,827	5,072	10,452	386	1,476	0	1,934
Social Security Administration	56,053	6,258	36,114	0	4,667	0	288	0	8,726	0
Tennessee Valley Authority ⁵	636	636	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-39. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1998**

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
US Arms Control & Disarmament Agency	810	280	530	0	0	0	0	0	0	0
United States Information Agency	150	150	0	0	0	0	0	0	0	0
US International Trade Commission	5,795	5,795	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-40. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1999**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Total, all agencies	16,078,598	5,547,246	3,506,666	514,034	3,958,147	1,200,083	1,083,687	102,150	103,765	62,820
Departments:										
Department of Agriculture, total	711,838	479,240	6,600	0	217,127	0	6,100	0	1,403	1,368
Agricultural Marketing Service	4,176	4,176	0	0	0	0	0	0	0	0
Agricultural Research Service	292,975	279,363	0	0	11,381	0	923	0	4	1,304
Cooperative State Research, Education, & Extension Service	214,729	12,333	6,488	0	193,355	0	1,864	0	689	0
Economic Research Service	50,255	48,035	0	0	2,220	0	0	0	0	0
Foreign Agricultural Service	507	218	0	0	289	0	0	0	0	0
Forest Service	142,918	131,066	112	0	9,683	0	1,283	0	710	64
Grain Inspection Packers & Stockyards Administration	564	564	0	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,314	2,085	0	0	199	0	30	0	0	0
Rural Business-Cooperative Svc	3,400	1,400	0	0	0	0	2,000	0	0	0
Department of Commerce, total	806,713	607,644	126,138	0	67,941	3	4,056	0	524	407
Bureau of the Census	4,183	4,183	0	0	0	0	0	0	0	0
Economic Development Admin	550	50	400	0	0	0	100	0	0	0
Nat'l Inst of Standards & Tech	307,694	179,317	117,962	0	7,965	3	2,040	0	0	407
Nat'l Oceanic & Atmospheric Admin	490,534	420,342	7,776	0	59,976	0	1,916	0	524	0
National Telecommunications & Information Administration	3,752	3,752	0	0	0	0	0	0	0	0
Department of Defense, total	2,982,459	1,020,311	1,311,664	15,149	464,757	86,203	64,793	11,662	415	7,505
Department of the Army	541,422	320,639	178,615	5,126	25,004	225	9,306	2,400	75	32
Department of the Navy	522,841	239,780	206,216	2,443	58,215	4,090	9,626	1,301	0	1,170
Department of the Air Force	580,744	324,966	240,059	272	13,200	105	860	870	0	412
Defense Agencies, total	1,337,452	134,926	686,774	7,308	368,338	81,783	45,001	7,091	340	5,891
Ballistic Missile Defense Org	84,646	14,017	54,129	38	3,978	9,065	130	2,557	340	392
Defense Adv Rsch Projects Agcy	970,083	44,370	467,746	4,341	349,744	52,666	43,183	4,531	0	3,502
Defense Info Systems Agcy	1,910	1,910	0	0	0	0	0	0	0	0
Defense Logistics Agency	8,248	8,248	0	0	0	0	0	0	0	0
Defense Special Weapons Agcy	213,063	49,454	149,603	2,929	1,487	6,081	1,509	3	0	1,997
Special Operations Command	18,287	5,486	12,301	0	500	0	0	0	0	0
Washington Headquarters Services	41,215	11,441	2,995	0	12,629	13,971	179	0	0	0
Department of Education	194,776	7,773	5,491	0	143,326	0	37,468	0	718	0
Department of Energy	1,901,637	291,974	117,575	426,447	89,946	877,261	24,487	72,283	1,132	532
Dept of Health & Human Svcs, total	5,004,632	1,327,874	309,745	54,973	2,508,286	17,677	700,989	8,600	57,919	18,569
Administration on Aging	1,085	85	0	0	500	0	500	0	0	0
Admin for Children & Families	32,928	803	3,534	0	20,881	0	7,389	0	321	0
Agcy for Hlth Care Policy & Rsch	159,665	41,708	42,374	0	47,083	0	28,250	0	0	250
Centers for Disease Control & Prevention	365,246	279,226	21,425	0	44,301	7,002	5,501	0	7,791	0
Food & Drug Administration	169,396	147,896	3,700	0	11,900	0	5,900	0	0	0
Health Care Financing Admin	50,000	50	32,577	0	6,605	0	7,151	0	3,327	290
Health Resources & Services Admin ...	12,525	1,688	0	0	8,256	0	2,581	0	0	0
National Institutes of Health	4,199,787	852,118	203,635	54,973	2,365,760	10,675	641,017	8,600	44,980	18,029
Office of the Secretary, total	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0
Office of the Asst Secretary, Planning & Evaluation	14,000	4,300	2,500	0	3,000	0	2,700	0	1,500	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-40. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1999**

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Dept of Housing & Urban Development ...	18,198	9,008	3,112	0	2,220	0	3,858	0	0	0
Department of the Interior, total	542,152	475,587	14,892	0	43,536	0	844	0	5,485	1,808
Bureau of Reclamation	7,650	6,650	0	0	1,000	0	0	0	0	0
Geological Survey	473,600	441,363	4,352	0	22,871	0	0	0	5,014	0
Minerals Management Service	27,459	7,003	8,839	0	9,038	0	300	0	471	1,808
National Park Service	33,443	20,571	1,701	0	10,627	0	544	0	0	0
Department of Justice, total	21,861	5,240	5,000	0	2,287	0	2,734	0	6,600	0
Bureau of Prisons	3,300	1,900	0	0	0	0	0	0	1,400	0
Immigration & Naturalization Service ²	400	40	0	0	0	0	360	0	0	0
Office of Justice Programs	18,161	3,300	5,000	0	2,287	0	2,374	0	5,200	0
Department of Labor, total	10,104	4,328	4,107	0	175	0	1,494	0	0	0
Bureau of Labor Statistics	1,300	1,300	0	0	0	0	0	0	0	0
Employment & Training Admin	1,954	360	0	0	100	0	1,494	0	0	0
Occupational Safety & Hlth Admin	4,615	1,663	2,952	0	0	0	0	0	0	0
Office of the Secretary	100	25	0	0	75	0	0	0	0	0
Pension Benefit Guaranty Corp	57	57	0	0	0	0	0	0	0	0
Pension & Welfare Benefits Admin	2,078	923	1,155	0	0	0	0	0	0	0
Department of State	976	313	648	0	0	15	0	0	0	0
Department of Transportation, total	439,529	197,703	156,116	1,398	46,335	0	15,811	5,000	17,026	140
Coast Guard	4,816	3,237	1,279	300	0	0	0	0	0	0
Federal Aviation Administration	156,305	62,090	71,215	0	18,000	0	0	5,000	0	0
Federal Highway Administration	194,632	78,907	69,829	1,098	20,505	0	7,267	0	17,026	0
Federal Railroad Administration	19,477	10,884	4,383	0	800	0	3,270	0	0	140
Federal Transit Administration	8,370	1,895	0	0	2,400	0	4,075	0	0	0
National Highway Traffic Safety Administration	51,449	38,417	7,203	0	4,630	0	1,199	0	0	0
Research & Special Programs Admin ..	4,480	2,273	2,207	0	0	0	0	0	0	0
Department of the Treasury, total	63,897	41,252	22,560	0	0	85	0	0	0	0
Bureau of Engraving & Printing	1,760	1,675	0	0	0	85	0	0	0	0
Internal Revenue Service	59,993	38,293	21,700	0	0	0	0	0	0	0
Office of Thrift Supervision	788	788	0	0	0	0	0	0	0	0
United States Customs Service ³	600	60	540	0	0	0	0	0	0	0
United States Secret Service	756	436	320	0	0	0	0	0	0	0
Department of Veterans Affairs	259,672	259,672	0	0	0	0	0	0	0	0
Other agencies:										
Appalachian Regional Commission	900	50	340	0	100	0	255	0	155	0
Consumer Product Safety Commission ...	236	236	0	0	0	0	0	0	0	0
Environmental Protection Agency	453,000	216,286	62,420	0	132,660	0	39,566	0	1,049	1,019
Federal Communications Commission	3,270	3,270	0	0	0	0	0	0	0	0
Federal Trade Commission	1,131	1,131	0	0	0	0	0	0	0	0
International Development Cooperation Agency, total	134,699	15,204	7,669	0	10,002	0	86,287	0	0	15,537
Agency for International Development ⁴	134,699	15,204	7,669	0	10,002	0	86,287	0	0	15,537
Library of Congress	483	483	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	2,216,957	554,240	1,281,379	842	76,267	207,137	82,241	2,334	499	12,018
National Archives & Records Admin	120	120	0	0	0	0	0	0	0	0
National Science Foundation	212,480	427	53,585	0	143,672	83	12,193	5	478	2,037
Nuclear Regulatory Commission	52,847	15,152	1,945	15,225	4,460	11,619	300	2,266	0	1,880
Social Security Administration	37,156	6,383	15,150	0	5,050	0	211	0	10,362	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-40. Preliminary Federal obligations for applied research, by agency and performer:
fiscal year 1999**

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
US Arms Control & Disarmament Agency	810	280	530	0	0	0	0	0	0	0
US International Trade Commission	6,065	6,065	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-41. Federal obligations for applied research, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

Page 1 of 1

Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	14,423,436	15,608,973	16,078,598
Life sciences, total	5,457,569	5,933,221	6,064,226
Biological (excluding environmental)	1,929,190	NA	NA
Environmental biology	376,449	NA	NA
Agricultural	293,247	NA	NA
Medical	2,497,556	NA	NA
Life sciences, n.e.c.	361,127	NA	NA
Psychology, total	251,512	274,083	280,078
Biological aspects	27,557	NA	NA
Social aspects	83,738	NA	NA
Psychological sciences, n.e.c.	140,217	NA	NA
Physical sciences, total	1,172,356	1,208,401	1,273,028
Astronomy	20,564	NA	NA
Chemistry	327,612	NA	NA
Physics	505,867	NA	NA
Physical sciences, n.e.c.	318,313	NA	NA
Environmental sciences, total	1,502,172	1,646,686	1,585,489
Atmospheric	484,809	NA	NA
Geological	303,514	NA	NA
Oceanography	294,177	NA	NA
Environmental sciences, n.e.c.	419,672	NA	NA
Mathematics & computer sciences, total	1,010,466	1,131,141	1,468,290
Mathematics	63,385	NA	NA
Computer sciences	875,148	NA	NA
Mathematics & computer sciences, n.e.c.	71,933	NA	NA
Engineering, total	4,107,261	4,393,610	4,310,151
Aeronautical	1,083,662	NA	NA
Astronautical	526,497	NA	NA
Chemical	166,928	NA	NA
Civil	230,194	NA	NA
Electrical	449,347	NA	NA
Mechanical	149,744	NA	NA
Metallurgy & materials	398,080	NA	NA
Engineering, n.e.c.	1,102,809	NA	NA
Social sciences, total	475,267	585,216	617,180
Anthropology	6,165	NA	NA
Economics	158,130	NA	NA
Political science	9,590	NA	NA
Sociology	17,565	NA	NA
Social sciences, n.e.c.	283,817	NA	NA
Other sciences, n.e.c.	446,833	436,615	480,156

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1997

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	14,423,436	5,457,569	251,512	1,172,356	1,502,172	1,010,466	4,107,261	475,267	446,833
Departments:									
Department of Agriculture, total	700,009	483,134	320	49,900	8,616	12,356	46,120	96,558	3,005
Agricultural Marketing Service	4,171	4,171	0	0	0	0	0	0	0
Agricultural Research Service	261,298	221,326	0	31,164	2,045	294	6,469	0	0
Cooperative State Research, Education, & Extension Service	243,630	175,980	0	13,886	1,821	0	14,946	36,997	0
Economic Research Service	47,703	0	0	0	0	0	0	47,703	0
Foreign Agricultural Service	507	507	0	0	0	0	0	0	0
Forest Service	137,420	79,300	320	4,850	4,750	9,800	24,705	10,690	3,005
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,262	0	0	0	0	2,262	0	0	0
Rural Business-Cooperative Svc	2,468	1,300	0	0	0	0	0	1,168	0
Department of Commerce, total	768,823	138,944	205	76,068	256,984	76,444	165,623	18,225	36,330
Bureau of the Census	2,352	0	205	0	0	1,481	0	609	57
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	293,277	27,680	0	54,702	172	57,875	152,631	217	0
Nat'l Oceanic & Atmospheric Admin	468,803	111,264	0	21,366	256,812	17,088	9,151	16,849	36,273
National Telecommunications & Information Administration	3,841	0	0	0	0	0	3,841	0	0
Department of Defense, total	2,786,947	201,910	48,567	222,303	239,249	465,227	1,493,546	557	115,588
Department of the Army	531,682	90,310	8,831	31,939	61,086	54,052	275,223	557	9,684
Department of the Navy	538,520	29,873	9,853	2,359	156,076	11,768	328,591	0	0
Department of the Air Force	628,519	25,801	21,552	98,786	7,304	40,090	422,088	0	12,898
Defense Agencies, total	1,088,226	55,926	8,331	89,219	14,783	359,317	467,644	0	93,006
Ballistic Missile Defense Org	92,614	0	0	22,607	860	28,934	40,213	0	0
Defense Adv Rsch Projects Agcy	700,874	24,410	0	7,303	745	326,185	330,672	0	11,559
Defense Info Systems Agcy	1,871	0	0	0	0	0	0	0	1,871
Defense Logistics Agency	7,041	0	7,041	0	0	0	0	0	0
Defense Special Weapons Agcy	199,624	3,804	0	44,966	11,688	795	59,207	0	79,164
Special Operations Command	16,138	605	0	0	0	0	15,121	0	412
Washington Headquarters Services	70,064	27,107	1,290	14,343	1,490	3,403	22,431	0	0
Department of Education	135,033	9,631	6,311	0	0	996	6,643	111,452	0
Department of Energy	1,596,836	52,298	0	564,417	149,296	299,256	508,049	0	23,520
Dept of Health & Human Svcs, total	4,376,290	3,772,386	137,092	58,111	11,218	41,664	53,104	102,231	200,484
Administration on Aging	175	0	0	0	0	0	0	175	0
Admin for Children & Families	17,380	0	0	0	0	0	0	17,380	0
Agcy for Hlth Care Policy & Rsch	134,067	49,658	560	0	0	8,642	0	32,235	42,972
Centers for Disease Control & Prevention	322,990	322,990	0	0	0	0	0	0	0
Food & Drug Administration	158,601	158,601	0	0	0	0	0	0	0
Health Care Financing Admin	43,601	43,601	0	0	0	0	0	0	0
Health Resources & Services Admin	12,083	12,083	0	0	0	0	0	0	0
National Institutes of Health	3,668,966	3,185,453	136,532	58,111	11,218	33,022	53,104	34,014	157,512
Office of the Secretary, total	18,427	0	0	0	0	0	0	18,427	0
Office of the Asst Secretary, Planning & Evaluation	18,427	0	0	0	0	0	0	18,427	0

See explanatory information, if any, and SOURCE at end of table.

Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	11,265	0	0	0	38	211	279	9,265	1,472
Department of the Interior, total	496,213	129,235	0	41,055	271,929	18,613	21,177	14,204	0
Bureau of Reclamation	5,393	0	0	0	0	0	5,393	0	0
Geological Survey	444,777	119,895	0	40,759	254,171	17,658	11,948	346	0
Minerals Management Service	20,592	0	0	296	15,053	267	3,378	1,598	0
National Park Service	25,451	9,340	0	0	2,705	688	458	12,260	0
Department of Justice, total	20,085	0	500	600	0	0	400	13,648	4,937
Bureau of Prisons	1,900	0	500	0	0	0	0	1,400	0
Drug Enforcement Administration ¹	1	0	0	0	0	0	0	0	1
Immigration & Naturalization Service ²	400	0	0	0	0	0	400	0	0
Office of Justice Programs	17,784	0	0	600	0	0	0	12,248	4,936
Department of Labor, total	10,447	0	0	0	0	109	0	10,338	0
Bureau of Labor Statistics	1,300	0	0	0	0	0	0	1,300	0
Employment & Training Admin	1,503	0	0	0	0	0	0	1,503	0
Occupational Safety & Hlth Admin	5,461	0	0	0	0	0	0	5,461	0
Office of the Secretary	109	0	0	0	0	109	0	0	0
Pension Benefit Guaranty Corp	54	0	0	0	0	0	0	54	0
Pension & Welfare Benefits Admin	2,020	0	0	0	0	0	0	2,020	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	343,665	8,966	29,616	49,018	11,292	13,898	190,197	10,933	29,745
Coast Guard	5,733	0	647	0	651	1,433	3,002	0	0
Federal Aviation Administration	159,443	4,306	23,603	44,629	5,886	2,616	59,515	0	18,888
Federal Highway Administration	111,630	1,384	4,377	3,060	3,316	4,269	79,075	5,292	10,857
Federal Railroad Administration	18,235	0	0	0	0	630	17,605	0	0
Federal Transit Administration	5,954	0	0	0	127	0	5,309	518	0
National Highway Traffic Safety Administration	36,397	3,276	0	0	0	3,640	24,358	5,123	0
Research & Special Programs Admin ..	6,273	0	989	1,329	1,312	1,310	1,333	0	0
Department of the Treasury, total	50,830	79	295	1,831	0	10,120	3	38,502	0
Bureau of Engraving & Printing	1,574	0	0	1,571	0	0	3	0	0
Internal Revenue Service	47,864	0	0	0	0	10,000	0	37,864	0
Office of Thrift Supervision	638	0	0	0	0	0	0	638	0
United States Customs Service ³	380	0	0	260	0	120	0	0	0
United States Secret Service	374	79	295	0	0	0	0	0	0
Department of Veterans Affairs	217,406	204,477	12,801	0	0	0	128	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ...	78	23	55	0	0	0	0	0	0
Environmental Protection Agency	357,976	98,962	0	0	153,194	0	105,820	0	0
Federal Communications Commission ...	3,099	0	0	85	0	112	1,536	1,366	0
Federal Trade Commission	696	0	0	0	0	0	0	696	0
International Development Cooperation Agency, total	176,542	159,120	0	0	0	0	0	15,099	2,323
Agency for International Development ⁴	176,542	159,120	0	0	0	0	0	15,099	2,323
Library of Congress	537	0	0	0	0	0	0	0	537
National Aeronautics & Space Admin	2,090,120	186,394	15,697	93,943	392,785	56,294	1,338,178	0	6,829
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	191,807	10,354	53	13,831	5,450	15,166	114,144	10,896	21,913
Nuclear Regulatory Commission	62,102	0	0	0	0	0	62,102	0	0
Social Security Administration	13,618	0	0	0	0	0	0	13,618	0
Tennessee Valley Authority ⁵	3,987	1,596	0	696	1,695	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	1,200	60	0	378	426	0	60	126	150
United States Information Agency	152	0	0	0	0	0	152	0	0
US International Trade Commission	5,677	0	0	0	0	0	0	5,677	0

- ¹ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	15,608,973	5,933,221	274,083	1,208,401	1,646,686	1,131,141	4,393,610	585,216	436,615
Departments:									
Department of Agriculture, total	741,318	504,710	329	50,195	8,477	12,836	47,492	114,154	3,125
Agricultural Marketing Service	4,098	4,098	0	0	0	0	0	0	0
Agricultural Research Service	280,459	240,571	0	31,207	1,631	331	6,719	0	0
Cooperative State Research, Education, & Extension Service	243,490	175,211	0	13,965	1,874	0	15,063	37,377	0
Economic Research Service	64,444	0	0	0	0	0	0	64,444	0
Foreign Agricultural Service	507	507	0	0	0	0	0	0	0
Forest Service	142,918	82,473	329	5,023	4,972	10,169	25,710	11,117	3,125
Grain Inspection Packers & Stockyards Administration	550	550	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,336	0	0	0	0	2,336	0	0	0
Rural Business-Cooperative Svc	2,516	1,300	0	0	0	0	0	1,216	0
Department of Commerce, total	784,870	148,313	208	73,078	274,132	73,551	153,030	20,604	41,954
Bureau of the Census	2,509	0	208	0	0	1,586	0	654	61
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	265,500	25,058	0	49,521	156	52,394	138,175	196	0
Nat'l Oceanic & Atmospheric Admin	512,647	123,255	0	23,557	273,976	19,571	11,191	19,204	41,893
National Telecommunications & Information Administration	3,664	0	0	0	0	0	3,664	0	0
Department of Defense, total	2,863,941	312,118	52,023	229,079	231,030	548,888	1,394,582	451	95,770
Department of the Army	677,954	184,379	8,563	37,116	66,930	54,804	313,934	451	11,777
Department of the Navy	509,654	28,643	9,447	2,261	142,326	11,243	315,734	0	0
Department of the Air Force	554,550	20,687	25,086	92,946	7,287	48,937	349,241	0	10,366
Defense Agencies, total	1,121,783	78,409	8,927	96,756	14,487	433,904	415,673	0	73,627
Ballistic Missile Defense Org	100,944	0	0	26,436	841	36,362	37,305	0	0
Defense Adv Rsch Projects Agcy	770,722	53,355	0	14,424	6,810	387,164	292,265	0	16,704
Defense Info Systems Agcy	1,630	0	0	0	0	0	0	0	1,630
Defense Logistics Agency	8,016	0	8,016	0	0	0	0	0	0
Defense Special Weapons Agcy	170,178	3,589	0	49,100	5,786	7,978	48,834	0	54,891
Special Operations Command	19,947	644	0	0	0	0	18,901	0	402
Washington Headquarters Services	50,346	20,821	911	6,796	1,050	2,400	18,368	0	0
Department of Education	149,907	11,309	7,410	0	0	1,170	7,800	122,218	0
Department of Energy	1,671,041	61,157	0	599,997	133,693	348,258	511,999	0	15,937
Dept of Health & Human Svcs, total	4,690,843	4,049,883	146,531	62,362	12,041	44,229	56,992	105,205	213,600
Administration on Aging	2,385	0	0	0	0	0	0	2,385	0
Admin for Children & Families	20,083	0	0	0	0	0	0	20,083	0
Agcy for Hlth Care Policy & Rsch	136,859	51,278	0	0	0	8,791	0	32,232	44,558
Centers for Disease Control & Prevention	358,457	358,457	0	0	0	0	0	0	0
Food & Drug Administration	159,090	159,090	0	0	0	0	0	0	0
Health Care Financing Admin	50,000	50,000	0	0	0	0	0	0	0
Health Resources & Services Admin	12,447	12,447	0	0	0	0	0	0	0
National Institutes of Health	3,937,522	3,418,611	146,531	62,362	12,041	35,438	56,992	36,505	169,042
Office of the Secretary, total	14,000	0	0	0	0	0	0	14,000	0
Office of the Asst Secretary, Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0

See explanatory information, if any, and SOURCE at end of table.

Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	14,122	0	0	0	43	268	339	11,622	1,850
Department of the Interior, total	526,121	139,240	0	40,958	283,232	20,864	23,240	18,587	0
Bureau of Reclamation	6,755	0	0	0	0	0	6,755	0	0
Geological Survey	460,958	126,553	0	40,751	260,993	19,666	12,478	517	0
Minerals Management Service	25,430	0	0	207	19,397	372	3,543	1,911	0
National Park Service	32,978	12,687	0	0	2,842	826	464	16,159	0
Department of Justice, total	26,270	0	500	300	0	0	400	20,827	4,243
Bureau of Prisons	3,213	0	500	0	0	0	0	2,713	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Office of Justice Programs	22,657	0	0	300	0	0	0	18,114	4,243
Department of Labor, total	9,535	0	0	0	0	100	0	9,435	0
Bureau of Labor Statistics	1,300	0	0	0	0	0	0	1,300	0
Employment & Training Admin	1,565	0	0	0	0	0	0	1,565	0
Occupational Safety & Hlth Admin	4,495	0	0	0	0	0	0	4,495	0
Office of the Secretary	100	0	0	0	0	100	0	0	0
Pension Benefit Guaranty Corp	55	0	0	0	0	0	0	55	0
Pension & Welfare Benefits Admin	2,020	0	0	0	0	0	0	2,020	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	417,601	10,367	35,232	41,746	12,952	9,109	266,821	12,536	28,838
Coast Guard	5,626	0	713	0	715	1,439	2,759	0	0
Federal Aviation Administration	150,774	4,506	27,083	35,881	5,111	0	60,291	0	17,902
Federal Highway Administration	185,228	2,067	6,347	4,116	5,444	183	150,343	5,792	10,936
Federal Railroad Administration	19,335	0	0	0	0	1,136	18,199	0	0
Federal Transit Administration	6,246	0	0	0	0	0	5,045	1,201	0
National Highway Traffic Safety Administration	42,439	3,794	0	0	0	4,668	28,434	5,543	0
Research & Special Programs Admin ..	7,953	0	1,089	1,749	1,682	1,683	1,750	0	0
Department of the Treasury, total	62,649	160	437	1,984	0	300	100	59,668	0
Bureau of Engraving & Printing	1,784	0	0	1,684	0	0	100	0	0
Internal Revenue Service	58,948	0	0	0	0	0	0	58,948	0
Office of Thrift Supervision	720	0	0	0	0	0	0	720	0
United States Customs Service ²	600	0	0	300	0	300	0	0	0
United States Secret Service	597	160	437	0	0	0	0	0	0
Department of Veterans Affairs	262,509	246,898	15,457	0	0	0	154	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ..	206	0	206	0	0	0	0	0	0
Environmental Protection Agency	450,000	124,402	0	0	192,579	0	133,019	0	0
Federal Communications Commission	3,462	0	0	140	0	116	1,459	1,747	0
Federal Trade Commission	1,287	0	0	0	0	0	0	1,287	0
International Development Cooperation Agency, total	141,405	127,405	0	0	0	0	0	11,900	2,100
Agency for International Development ³	141,405	127,405	0	0	0	0	0	11,900	2,100
Library of Congress	462	0	0	0	0	0	0	0	462
National Aeronautics & Space Admin	2,483,595	186,869	15,697	93,943	492,787	56,294	1,631,178	0	6,827
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	191,712	10,348	53	13,824	5,447	15,158	114,088	10,891	21,903
Nuclear Regulatory Commission	50,677	0	0	0	0	0	50,677	0	0
Social Security Administration	56,053	0	0	0	0	0	0	56,053	0
Tennessee Valley Authority ⁴	636	0	0	423	213	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	810	42	0	252	60	0	90	360	6
United States Information Agency	150	0	0	0	0	0	150	0	0
US International Trade Commission	5,795	0	0	0	0	0	0	5,795	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁴ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	16,078,598	6,064,226	280,078	1,273,028	1,585,489	1,468,290	4,310,151	617,180	480,156
Departments:									
Department of Agriculture, total	711,838	499,008	329	49,661	8,104	12,829	44,216	94,566	3,125
Agricultural Marketing Service	4,176	4,176	0	0	0	0	0	0	0
Agricultural Research Service	292,975	251,306	0	32,600	1,704	346	7,019	0	0
Cooperative State Research, Education, & Extension Service	214,729	157,982	0	12,038	1,428	0	11,487	31,794	0
Economic Research Service	50,255	0	0	0	0	0	0	50,255	0
Foreign Agricultural Service	507	507	0	0	0	0	0	0	0
Forest Service	142,918	82,473	329	5,023	4,972	10,169	25,710	11,117	3,125
Grain Inspection Packers & Stockyards Administration	564	564	0	0	0	0	0	0	0
Nat'l Agricultural Statistics Svc	2,314	0	0	0	0	2,314	0	0	0
Rural Business-Cooperative Svc	3,400	2,000	0	0	0	0	0	1,400	0
Department of Commerce, total	806,713	137,618	2,299	77,855	275,001	81,607	174,033	19,497	38,803
Bureau of the Census	4,183	0	364	0	0	2,634	0	1,084	101
Economic Development Admin	550	0	0	0	0	0	0	550	0
Nat'l Inst of Standards & Tech	307,694	29,040	0	57,391	181	60,721	160,134	227	0
Nat'l Oceanic & Atmospheric Admin	490,534	108,578	1,935	20,464	274,820	18,252	10,147	17,636	38,702
National Telecommunications & Information Administration	3,752	0	0	0	0	0	3,752	0	0
Department of Defense, total	2,982,459	219,955	49,489	262,048	174,715	698,328	1,477,441	430	100,053
Department of the Army	541,422	76,713	9,300	38,223	21,855	59,110	324,508	430	11,283
Department of the Navy	522,841	29,523	9,737	2,331	146,699	11,552	322,999	0	0
Department of the Air Force	580,744	24,235	22,204	96,955	3,091	53,820	373,946	0	6,493
Defense Agencies, total	1,337,452	89,484	8,248	124,539	3,070	573,846	455,988	0	82,277
Ballistic Missile Defense Org	84,646	0	0	27,036	466	22,604	34,540	0	0
Defense Adv Rsch Projects Agcy	970,083	68,476	0	15,500	0	542,210	341,841	0	2,056
Defense Info Systems Agcy	1,910	0	0	0	0	0	0	0	1,910
Defense Logistics Agency	8,248	0	8,248	0	0	0	0	0	0
Defense Special Weapons Agcy	213,063	3,166	0	59,487	2,604	8,272	61,656	0	77,878
Special Operations Command	18,287	694	0	0	0	0	17,160	0	433
Washington Headquarters Services	41,215	17,148	0	22,516	0	760	791	0	0
Department of Education	194,776	11,779	7,716	0	0	1,218	8,123	165,940	0
Department of Energy	1,901,637	42,947	0	609,686	103,400	516,000	597,115	0	32,489
Dept of Health & Human Svcs, total	5,004,632	4,303,483	156,291	66,516	12,843	48,084	60,788	124,665	231,962
Administration on Aging	1,085	0	0	0	0	0	0	1,085	0
Admin for Children & Families	32,928	0	0	0	0	0	0	32,928	0
Agcy for Hlth Care Policy & Rsch	159,665	60,002	0	0	0	10,286	0	37,716	51,661
Centers for Disease Control & Prevention	365,246	365,246	0	0	0	0	0	0	0
Food & Drug Administration	169,396	169,396	0	0	0	0	0	0	0
Health Care Financing Admin	50,000	50,000	0	0	0	0	0	0	0
Health Resources & Services Admin	12,525	12,525	0	0	0	0	0	0	0
National Institutes of Health	4,199,787	3,646,314	156,291	66,516	12,843	37,798	60,788	38,936	180,301
Office of the Secretary, total	14,000	0	0	0	0	0	0	14,000	0
Office of the Asst Secretary, Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0

See explanatory information, if any, and SOURCE at end of table.

Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Dept of Housing & Urban Development ...	18,198	0	0	0	55	346	437	14,976	2,384
Department of the Interior, total	542,152	149,839	0	44,427	282,180	21,984	25,190	18,532	0
Bureau of Reclamation	7,650	0	0	0	0	0	7,650	0	0
Geological Survey	473,600	137,119	0	44,306	257,381	20,851	13,426	517	0
Minerals Management Service	27,459	0	0	121	21,935	303	3,646	1,454	0
National Park Service	33,443	12,720	0	0	2,864	830	468	16,561	0
Department of Justice, total	21,861	0	500	1,000	0	0	400	16,990	2,971
Bureau of Prisons	3,300	0	500	0	0	0	0	2,800	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Office of Justice Programs	18,161	0	0	1,000	0	0	0	14,190	2,971
Department of Labor, total	10,104	0	0	0	0	100	0	10,004	0
Bureau of Labor Statistics	1,300	0	0	0	0	0	0	1,300	0
Employment & Training Admin	1,954	0	0	0	0	0	0	1,954	0
Occupational Safety & Hlth Admin	4,615	0	0	0	0	0	0	4,615	0
Office of the Secretary	100	0	0	0	0	100	0	0	0
Pension Benefit Guaranty Corp	57	0	0	0	0	0	0	57	0
Pension & Welfare Benefits Admin	2,078	0	0	0	0	0	0	2,078	0
Department of State	976	0	0	0	0	0	0	976	0
Department of Transportation, total	439,529	10,756	31,527	50,099	9,609	14,330	269,079	19,354	34,775
Coast Guard	4,816	0	586	0	591	1,203	2,436	0	0
Federal Aviation Administration	156,305	4,029	23,482	44,941	2,619	0	60,157	0	21,077
Federal Highway Administration	194,632	2,266	6,800	4,056	5,740	5,659	150,244	6,169	13,698
Federal Railroad Administration	19,477	0	0	0	0	1,000	18,477	0	0
Federal Transit Administration	8,370	0	0	0	0	0	8,217	153	0
National Highway Traffic Safety Administration	51,449	4,461	0	0	0	5,659	28,297	13,032	0
Research & Special Programs Admin ..	4,480	0	659	1,102	659	809	1,251	0	0
Department of the Treasury, total	63,897	125	631	1,960	0	300	100	60,781	0
Bureau of Engraving & Printing	1,760	0	0	1,660	0	0	100	0	0
Internal Revenue Service	59,993	0	0	0	0	0	0	59,993	0
Office of Thrift Supervision	788	0	0	0	0	0	0	788	0
United States Customs Service ²	600	0	0	300	0	300	0	0	0
United States Secret Service	756	125	631	0	0	0	0	0	0
Department of Veterans Affairs	259,672	244,216	15,304	0	0	0	152	0	0
Other agencies:									
Appalachian Regional Commission	900	0	0	0	0	0	0	900	0
Consumer Product Safety Commission ..	236	0	236	0	0	0	0	0	0
Environmental Protection Agency	453,000	125,232	0	0	193,863	0	133,905	0	0
Federal Communications Commission	3,270	0	0	140	0	70	1,610	1,450	0
Federal Trade Commission	1,131	0	0	0	0	0	0	1,131	0
International Development Cooperation Agency, total	134,699	121,363	0	0	0	0	0	11,336	2,000
Agency for International Development ³	134,699	121,363	0	0	0	0	0	11,336	2,000
Library of Congress	483	0	0	0	0	0	0	0	483
National Aeronautics & Space Admin	2,216,957	186,394	15,697	93,943	519,622	56,294	1,338,178	0	6,829
National Archives & Records Admin	120	0	0	120	0	0	0	0	0
National Science Foundation	212,480	11,469	59	15,321	6,037	16,800	126,447	12,071	24,276
Nuclear Regulatory Commission	52,847	0	0	0	0	0	52,847	0	0
Social Security Administration	37,156	0	0	0	0	0	0	37,156	0

See explanatory information, if any, and SOURCE at end of table.

Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
US Arms Control & Disarmament Agency	810	42	0	252	60	0	90	360	6
US International Trade Commission	6,065	0	0	0	0	0	0	6,065	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-45. Federal obligations for applied research in psychology and life sciences,
by agency and detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 1 of 2

Agency and subdivision	Psychology				Life sciences					
	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	251,512	27,557	83,738	140,217	5,457,569	1,929,190	376,449	293,247	2,497,556	361,127
Departments:										
Department of Agriculture, total	320	0	320	0	483,134	61,667	144,094	267,144	10,229	0
Agricultural Marketing Service	0	0	0	0	4,171	0	0	4,171	0	0
Agricultural Research Service	0	0	0	0	221,326	7,902	39,858	170,536	3,030	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	175,980	38,865	44,536	88,780	3,799	0
Foreign Agricultural Service	0	0	0	0	507	0	0	507	0	0
Forest Service	320	0	320	0	79,300	14,900	59,700	1,300	3,400	0
Grain Inspection Packers & Stockyards Administration	0	0	0	0	550	0	0	550	0	0
Rural Business-Cooperative Svc	0	0	0	0	1,300	0	0	1,300	0	0
Department of Commerce, total	205	0	0	205	138,944	24,386	64,969	23,307	21,586	4,696
Bureau of the Census	205	0	0	205	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	0	0	0	0	27,680	6,107	0	974	16,703	3,896
Nat'l Oceanic & Atmospheric Admin	0	0	0	0	111,264	18,279	64,969	22,333	4,883	800
Department of Defense, total	48,567	10,603	34,357	3,607	201,910	31,822	11,527	1,390	134,297	22,874
Department of the Army	8,831	0	8,736	95	90,310	2,170	0	0	86,910	1,230
Department of the Navy	9,853	9,853	0	0	29,873	0	0	0	15,618	14,255
Department of the Air Force	21,552	750	17,290	3,512	25,801	8,766	11,527	0	0	5,508
Defense Agencies, total	8,331	0	8,331	0	55,926	20,886	0	1,390	31,769	1,881
Defense Adv Rsch Projects Agcy	0	0	0	0	24,410	14,110	0	0	9,024	1,276
Defense Logistics Agency	7,041	0	7,041	0	0	0	0	0	0	0
Defense Special Weapons Agcy	0	0	0	0	3,804	2,776	0	0	1,028	0
Special Operations Command	0	0	0	0	605	0	0	0	0	605
Washington Headquarters Services	1,290	0	1,290	0	27,107	4,000	0	1,390	21,717	0
Department of Education	6,311	0	3,654	2,657	9,631	0	0	0	1,993	7,638
Department of Energy	0	0	0	0	52,298	0	0	0	52,298	0
Dept of Health & Human Svcs, total	137,092	4,181	2,274	130,637	3,772,386	1,648,241	28	0	1,969,032	155,085
Agcy for Hlth Care Policy & Rsch	560	0	214	346	49,658	28	0	0	45,175	4,455
Centers for Disease Control & Prevention	0	0	0	0	322,990	0	0	0	322,990	0
Food & Drug Administration	0	0	0	0	158,601	158,601	0	0	0	0
Health Care Financing Admin	0	0	0	0	43,601	0	0	0	0	43,601
Health Resources & Services Admin	0	0	0	0	12,083	0	0	0	12,083	0
National Institutes of Health	136,532	4,181	2,060	130,291	3,185,453	1,489,612	28	0	1,588,784	107,029
Department of the Interior, total	0	0	0	0	129,235	70,075	58,571	589	0	0
Geological Survey	0	0	0	0	119,895	63,303	56,453	139	0	0
National Park Service	0	0	0	0	9,340	6,772	2,118	450	0	0
Department of Justice, total	500	0	300	200	0	0	0	0	0	0
Bureau of Prisons	500	0	300	200	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-45. Federal obligations for applied research in psychology and life sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 2 of 2

Agency and subdivision	Psychology				Life sciences					
	Total	Bio-logical aspects	Social aspects	Psycho-logical sciences, n.e.c.	Total	Bio-logical	Environ-mental biology	Agri-cultural	Medical	Life sciences, n.e.c.
Department of Transportation, total	29,616	0	28,627	989	8,966	0	567	817	4,306	3,276
Coast Guard	647	0	647	0	0	0	0	0	0	0
Federal Aviation Administration	23,603	0	23,603	0	4,306	0	0	0	4,306	0
Federal Highway Administration	4,377	0	4,377	0	1,384	0	567	817	0	0
National Highway Traffic Safety Administration	0	0	0	0	3,276	0	0	0	0	3,276
Research & Special Programs Admin ..	989	0	0	989	0	0	0	0	0	0
Department of the Treasury, total	295	0	0	295	79	0	0	0	0	79
United States Secret Service	295	0	0	295	79	0	0	0	0	79
Department of Veterans Affairs	12,801	12,773	28	0	204,477	33,058	0	0	171,419	0
Other agencies:										
Consumer Product Safety Commission ...	55	0	0	55	23	23	0	0	0	0
Environmental Protection Agency	0	0	0	0	98,962	0	80,192	0	18,770	0
International Development Cooperation Agency, total	0	0	0	0	159,120	0	0	0	0	159,120
Agency for International Development ¹	0	0	0	0	159,120	0	0	0	0	159,120
National Aeronautics & Space Admin	15,697	0	14,125	1,572	186,394	58,569	5,900	0	113,626	8,299
National Science Foundation	53	0	53	0	10,354	1,189	9,165	0	0	0
Tennessee Valley Authority ²	0	0	0	0	1,596	160	1,436	0	0	0
US Arms Control & Disarmament Agency	0	0	0	0	60	0	0	0	0	60

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

² In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-46. Federal obligations for applied research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	1,172,356	20,564	327,612	505,867	318,313	1,502,172	484,809	303,514	294,177	419,672
Departments:										
Department of Agriculture, total	49,900	0	47,001	2,899	0	8,616	7,417	1,199	0	0
Agricultural Research Service	31,164	0	29,615	1,549	0	2,045	1,946	99	0	0
Cooperative State Research, Education, & Extension Service	13,886	0	13,886	0	0	1,821	1,821	0	0	0
Forest Service	4,850	0	3,500	1,350	0	4,750	3,650	1,100	0	0
Department of Commerce, total	76,068	0	31,427	44,142	499	256,984	111,920	3,840	133,215	8,009
Nat'l Inst of Standards & Tech	54,702	0	19,838	34,365	499	172	0	172	0	0
Nat'l Oceanic & Atmospheric Admin	21,366	0	11,589	9,777	0	256,812	111,920	3,668	133,215	8,009
Department of Defense, total	222,303	0	44,160	119,956	58,187	239,249	28,266	2,769	55,315	152,899
Department of the Army	31,939	0	5,306	6,820	19,813	61,086	7,275	1,222	0	52,589
Department of the Navy	2,359	0	0	2,359	0	156,076	13,207	0	53,825	89,044
Department of the Air Force	98,786	0	13,932	79,247	5,607	7,304	5,479	1,547	0	278
Defense Agencies, total	89,219	0	24,922	31,530	32,767	14,783	2,305	0	1,490	10,988
Ballistic Missile Defense Org	22,607	0	16,000	5,008	1,599	860	860	0	0	0
Defense Adv Rsch Projects Agcy	7,303	0	0	1,317	5,986	745	0	0	745	0
Defense Special Weapons Agcy	44,966	0	0	21,174	23,792	11,688	700	0	0	10,988
Washington Headquarters Services	14,343	0	8,922	4,031	1,390	1,490	745	0	745	0
Department of Energy	564,417	0	106,474	223,042	234,901	149,296	0	0	215	149,081
Dept of Health & Human Svcs, total	58,111	0	51,587	6,524	0	11,218	0	0	0	11,218
National Institutes of Health	58,111	0	51,587	6,524	0	11,218	0	0	0	11,218
Dept of Housing & Urban Development	0	0	0	0	0	38	0	0	0	38
Department of the Interior, total	41,055	0	33,966	7,089	0	271,929	4,346	253,634	13,182	767
Geological Survey	40,759	0	33,966	6,793	0	254,171	787	253,384	0	0
Minerals Management Service	296	0	0	296	0	15,053	1,473	0	12,986	594
National Park Service	0	0	0	0	0	2,705	2,086	250	196	173
Department of Justice, total	600	0	300	0	300	0	0	0	0	0
Office of Justice Programs	600	0	300	0	300	0	0	0	0	0
Department of Transportation, total	49,018	0	0	45,945	3,073	11,292	7,866	0	651	2,775
Coast Guard	0	0	0	0	0	651	0	0	651	0
Federal Aviation Administration	44,629	0	0	44,629	0	5,886	5,886	0	0	0
Federal Highway Administration	3,060	0	0	1,316	1,744	3,316	1,980	0	0	1,336
Federal Transit Administration	0	0	0	0	0	127	0	0	0	127
Research & Special Programs Admin	1,329	0	0	0	1,329	1,312	0	0	0	1,312
Department of the Treasury, total	1,831	0	260	0	1,571	0	0	0	0	0
Bureau of Engraving & Printing	1,571	0	0	0	1,571	0	0	0	0	0
United States Customs Service ¹	260	0	260	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	0	0	0	0	0	153,194	71,437	9,967	0	71,790
Federal Communications Commission	85	0	0	0	85	0	0	0	0	0
National Aeronautics & Space Admin	93,943	20,551	7,322	53,656	12,414	392,785	252,474	28,699	89,211	22,401
National Archives & Records Admin	120	0	120	0	0	0	0	0	0	0
National Science Foundation	13,831	13	4,582	2,608	6,628	5,450	48	2,980	2,388	34
Tennessee Valley Authority ²	696	0	173	0	523	1,695	1,035	0	0	660
US Arms Control & Disarmament Agency	378	0	240	6	132	426	0	426	0	0

¹ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

² In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-47. Federal obligations for applied research in engineering, by agency
and detailed field of engineering: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metallurgy and materials	Engi- neering, n.e.c.
Total, all agencies	4,107,261	1,083,662	526,497	166,928	230,194	449,347	149,744	398,080	1,102,809
Departments:									
Department of Agriculture, total	46,120	0	0	5,303	4,314	227	2,674	0	33,602
Agricultural Research Service	6,469	0	0	3,603	914	172	324	0	1,456
Cooperative State Research, Education, & Extension Service	14,946	0	0	0	0	0	0	0	14,946
Forest Service	24,705	0	0	1,700	3,400	55	2,350	0	17,200
Department of Commerce, total	165,623	0	0	18,494	13,626	49,957	3,703	46,308	33,535
Nat'l Inst of Standards & Tech	152,631	0	0	18,494	13,626	40,854	3,703	46,308	29,646
Nat'l Oceanic & Atmospheric Admin	9,151	0	0	0	0	5,262	0	0	3,889
National Telecommunications & Information Administration	3,841	0	0	0	0	3,841	0	0	0
Department of Defense, total	1,493,546	200,788	131,963	21,231	53,163	350,470	113,276	302,895	319,760
Department of the Army	275,223	27,327	325	11,185	25,636	102,479	47,060	18,529	42,682
Department of the Navy	328,591	30,869	0	5,241	0	116,791	27,755	45,369	102,566
Department of the Air Force	422,088	123,167	129,638	1,940	16,248	66,391	28,892	49,715	6,097
Defense Agencies, total	467,644	19,425	2,000	2,865	11,279	64,809	9,569	189,282	168,415
Ballistic Missile Defense Org	40,213	5,429	2,000	1,952	0	10,940	0	12,343	7,549
Defense Adv Rsch Projects Agcy	330,672	13,764	0	16	5,376	11,909	575	176,939	122,093
Defense Special Weapons Agcy	59,207	232	0	897	5,903	23,129	8,994	0	20,052
Special Operations Command	15,121	0	0	0	0	0	0	0	15,121
Washington Headquarters Services	22,431	0	0	0	0	18,831	0	0	3,600
Department of Education	6,643	0	0	0	0	0	0	0	6,643
Department of Energy	508,049	0	0	95,924	37,152	24,264	213	34,022	316,474
Dept of Health & Human Svcs, total	53,104	0	0	0	0	0	0	0	53,104
National Institutes of Health	53,104	0	0	0	0	0	0	0	53,104
Dept of Housing & Urban Development	279	0	0	0	0	0	0	0	279
Department of the Interior, total	21,177	0	0	13,175	7,593	101	163	145	0
Bureau of Reclamation	5,393	0	0	0	5,393	0	0	0	0
Geological Survey	11,948	0	0	10,869	815	101	163	0	0
Minerals Management Service	3,378	0	0	2,297	936	0	0	145	0
National Park Service	458	0	0	9	449	0	0	0	0
Department of Justice, total	400	0	0	0	0	0	400	0	0
Immigration & Naturalization Service ¹	400	0	0	0	0	0	400	0	0
Department of Transportation, total	190,197	0	0	0	105,225	4,903	20,372	8,206	51,491
Coast Guard	3,002	0	0	0	426	1,345	603	628	0
Federal Aviation Administration	59,515	0	0	0	48,044	1,214	3,470	6,787	0
Federal Highway Administration	79,075	0	0	0	53,881	524	221	0	24,449
Federal Railroad Administration	17,605	0	0	0	2,874	1,820	7,007	791	5,113
Federal Transit Administration	5,309	0	0	0	0	0	0	0	5,309
National Highway Traffic Safety Administration	24,358	0	0	0	0	0	9,071	0	15,287
Research & Special Programs Admin ..	1,333	0	0	0	0	0	0	0	1,333
Department of the Treasury, total	3	0	0	0	0	0	0	0	3
Bureau of Engraving & Printing	3	0	0	0	0	0	0	0	3
Department of Veterans Affairs	128	0	0	0	0	0	0	0	128
Other agencies:									
Environmental Protection Agency	105,820	0	0	2,332	0	0	0	0	103,488
Federal Communications Commission	1,536	0	0	0	0	418	0	0	1,118
National Aeronautics & Space Admin	1,338,178	882,874	394,534	548	40	18,214	7,833	3,289	30,846
National Science Foundation	114,144	0	0	9,921	9,081	641	1,110	3,215	90,176
Nuclear Regulatory Commission	62,102	0	0	0	0	0	0	0	62,102
US Arms Control & Disarmament Agency	60	0	0	0	0	0	0	0	60
United States Information Agency	152	0	0	0	0	152	0	0	0

¹ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Total, all agencies	1,010,466	63,385	875,148	71,933	475,267	6,165	158,130	9,590	17,565	283,817
Departments:										
Department of Agriculture, total	12,356	12,356	0	0	96,558	225	88,760	0	7,573	0
Agricultural Research Service	294	294	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	36,997	0	30,289	0	6,708	0
Economic Research Service	0	0	0	0	47,703	0	47,703	0	0	0
Forest Service	9,800	9,800	0	0	10,690	225	9,600	0	865	0
Nat'l Agricultural Statistics Svc	2,262	2,262	0	0	0	0	0	0	0	0
Rural Business-Cooperative Svc	0	0	0	0	1,168	0	1,168	0	0	0
Department of Commerce, total	76,444	10,538	58,463	7,443	18,225	0	4,946	7,092	5,578	609
Bureau of the Census	1,481	0	0	1,481	609	0	0	0	0	609
Economic Development Admin	0	0	0	0	550	0	550	0	0	0
Nat'l Inst of Standards & Tech	57,875	2,642	49,271	5,962	217	0	217	0	0	0
Nat'l Oceanic & Atmospheric Admin	17,088	7,896	9,192	0	16,849	0	4,179	7,092	5,578	0
Department of Defense, total	465,227	16,883	434,375	13,969	557	0	373	0	184	0
Department of the Army	54,052	5,622	46,585	1,845	557	0	373	0	184	0
Department of the Navy	11,768	0	11,768	0	0	0	0	0	0	0
Department of the Air Force	40,090	8,536	28,320	3,234	0	0	0	0	0	0
Defense Agencies, total	359,317	2,725	347,702	8,890	0	0	0	0	0	0
Ballistic Missile Defense Org	28,934	1,477	22,000	5,457	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	326,185	1,248	324,907	30	0	0	0	0	0	0
Defense Special Weapons Agcy	795	0	795	0	0	0	0	0	0	0
Washington Headquarters Services	3,403	0	0	3,403	0	0	0	0	0	0
Department of Education	996	0	996	0	111,452	0	0	0	0	111,452
Department of Energy	299,256	0	298,956	300	0	0	0	0	0	0
Dept of Health & Human Svcs, total	41,664	15,763	25,558	343	102,231	32	28,987	0	921	72,291
Administration on Aging	0	0	0	0	175	0	0	0	0	175
Admin for Children & Families	0	0	0	0	17,380	0	0	0	0	17,380
Agcy for Hlth Care Policy & Rsch	8,642	381	7,918	343	32,235	32	28,987	0	837	2,379
National Institutes of Health	33,022	15,382	17,640	0	34,014	0	0	0	84	33,930
Office of the Secretary, total	0	0	0	0	18,427	0	0	0	0	18,427
Office of the Asst Secretary, Planning & Evaluation	0	0	0	0	18,427	0	0	0	0	18,427

See explanatory information, if any, and SOURCE at end of table.

Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Dept of Housing & Urban Development ...	211	0	0	211	9,265	0	7,312	119	764	1,070
Department of the Interior, total	18,613	3,247	15,366	0	14,204	5,290	753	0	77	8,084
Geological Survey	17,658	3,247	14,411	0	346	0	0	0	0	346
Minerals Management Service	267	0	267	0	1,598	0	753	0	68	777
National Park Service	688	0	688	0	12,260	5,290	0	0	9	6,961
Department of Justice, total	0	0	0	0	13,648	30	20	0	1,250	12,348
Bureau of Prisons	0	0	0	0	1,400	30	20	0	1,250	100
Office of Justice Programs	0	0	0	0	12,248	0	0	0	0	12,248
Department of Labor, total	109	0	109	0	10,338	0	10,338	0	0	0
Bureau of Labor Statistics	0	0	0	0	1,300	0	1,300	0	0	0
Employment & Training Admin	0	0	0	0	1,503	0	1,503	0	0	0
Occupational Safety & Hlth Admin	0	0	0	0	5,461	0	5,461	0	0	0
Office of the Secretary	109	0	109	0	0	0	0	0	0	0
Pension Benefit Guaranty Corp	0	0	0	0	54	0	54	0	0	0
Pension & Welfare Benefits Admin	0	0	0	0	2,020	0	2,020	0	0	0
Department of State	0	0	0	0	976	0	0	0	0	976
Department of Transportation, total	13,898	564	7,616	5,718	10,933	0	3,521	766	57	6,589
Coast Guard	1,433	0	1,433	0	0	0	0	0	0	0
Federal Aviation Administration	2,616	0	2,616	0	0	0	0	0	0	0
Federal Highway Administration	4,269	564	3,147	558	5,292	0	3,107	766	57	1,362
Federal Railroad Administration	630	0	420	210	0	0	0	0	0	0
Federal Transit Administration	0	0	0	0	518	0	414	0	0	104
National Highway Traffic Safety Administration	3,640	0	0	3,640	5,123	0	0	0	0	5,123
Research & Special Programs Admin ..	1,310	0	0	1,310	0	0	0	0	0	0
Department of the Treasury, total	10,120	0	10,120	0	38,502	0	2,184	0	0	36,318
Internal Revenue Service	10,000	0	10,000	0	37,864	0	1,546	0	0	36,318
Office of Thrift Supervision	0	0	0	0	638	0	638	0	0	0
United States Customs Service ¹	120	0	120	0	0	0	0	0	0	0
Other agencies:										
Appalachian Regional Commission	0	0	0	0	900	0	0	900	0	0
Federal Communications Commission	112	0	112	0	1,366	0	1,366	0	0	0
Federal Trade Commission	0	0	0	0	696	0	696	0	0	0
International Development Cooperation Agency, total	0	0	0	0	15,099	0	0	0	0	15,099
Agency for International Development ²	0	0	0	0	15,099	0	0	0	0	15,099
National Aeronautics & Space Admin	56,294	3,850	8,495	43,949	0	0	0	0	0	0
National Science Foundation	15,166	184	14,982	0	10,896	588	3,197	587	1,161	5,363
Social Security Administration	0	0	0	0	13,618	0	0	0	0	13,618

See explanatory information, if any, and SOURCE at end of table.

Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
US Arms Control & Disarmament Agency	0	0	0	0	126	0	0	126	0	0
US International Trade Commission	0	0	0	0	5,677	0	5,677	0	0	0

¹ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Total, all agencies	40,464,265	9,052,738	27,025,836	368,633	1,387,879	1,102,138	667,183	603,414	117,116	139,328
Departments:										
Department of Agriculture, total	98,513	93,578	0	0	4,198	0	429	0	1	307
Agricultural Marketing Service	615	615	0	0	0	0	0	0	0	0
Agricultural Research Service	61,887	58,382	0	0	2,847	0	350	0	1	307
Animal & Plant Hlth Inspection Svc	19,849	18,419	0	0	1,351	0	79	0	0	0
Food Safety Inspection Service	15	15	0	0	0	0	0	0	0	0
Forest Service	13,945	13,945	0	0	0	0	0	0	0	0
Grain Inspection Packers & Stockyards Administration	2,202	2,202	0	0	0	0	0	0	0	0
Department of Commerce, total	195,060	60,642	110,304	0	7,732	36	9,759	0	6,299	288
Bureau of the Census	1,707	1,707	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	128,940	17,105	110,249	0	230	0	1,068	0	0	288
Nat'l Oceanic & Atmospheric Admin	40,460	38,779	55	0	1,565	36	0	0	25	0
National Telecommunications & Information Administration	23,953	3,051	0	0	5,937	0	8,691	0	6,274	0
Department of Defense, total ²	30,978,446	6,777,493	22,825,783	80,018	399,287	179,489	111,409	484,412	17,662	102,893
Department of the Army	4,111,072	1,878,681	2,062,289	4,972	79,264	19,446	3,747	30,487	3,936	28,250
Department of the Navy	7,329,758	2,606,300	4,454,759	1,443	139,962	20,851	37,394	63,391	0	5,658
Department of the Air Force	13,134,960	629,775	12,104,099	29,987	9,571	26,822	699	319,891	13,686	430
Defense Agencies, total	6,106,332	1,406,042	4,184,560	43,616	170,490	111,851	69,569	51,609	40	68,555
Ballistic Missile Defense Org	3,134,574	493,457	2,411,254	23,804	71,985	56,599	134	18,599	0	58,742
Defense Advanced Rsch Projects Agency	1,262,581	300,151	773,157	2,374	77,996	28,158	63,632	15,821	0	1,292
Defense Info Systems Agcy	55,605	16,790	30,465	0	0	300	0	8,050	0	0
Defense Logistics Agency	38,135	15,697	19,456	0	2,794	0	0	188	0	0
Defense Special Weapons Agcy	26,883	7,301	15,111	1,322	0	2,376	713	60	0	0
Joint Staff	38,520	38,520	0	0	0	0	0	0	0	0
Special Operations Command	118,941	36,238	80,775	1,638	290	0	0	0	0	0
Washington Headquarters Services	1,431,093	497,888	854,342	14,478	17,425	24,418	5,090	8,891	40	8,521
Operational Test & Evaluation, Director	26,610	4,023	8,167	0	0	519	0	13,901	0	0
Test & Evaluation, Deputy Under Secretary of Defense	269,714	252,672	11,909	0	0	0	0	5,133	0	0
Department of Defense, total advanced technology (at) ²	4,248,587	1,023,538	2,633,161	22,857	223,443	89,865	105,115	54,230	13,726	82,652
Department of the Army (at)	581,503	218,638	278,333	2,449	58,779	2,566	1,458	2,743	0	16,537
Department of the Navy (at)	526,655	123,318	326,186	0	31,687	7,665	33,683	4,116	0	0
Department of the Air Force (at)	456,931	90,635	333,082	0	4,081	3,446	480	11,521	13,686	0
Defense Agencies, total (at)	2,683,498	590,947	1,695,560	20,408	128,896	76,188	69,494	35,850	40	66,115
Ballistic Missile Def Org (at)	842,185	127,959	582,790	1,846	31,927	23,136	59	18,166	0	56,302
Defense Advanced Rsch Projects Agency (at)	1,180,538	261,959	729,306	2,374	77,996	28,158	63,632	15,821	0	1,292
Defense Logistics Agency (at)	30,321	13,068	14,459	0	2,794	0	0	0	0	0
Def Special Weapons Agcy (at)	26,883	7,301	15,111	1,322	0	2,376	713	60	0	0
Joint Staff (at)	38,520	38,520	0	0	0	0	0	0	0	0
Special Operations Command (at) ...	49,955	15,219	33,926	688	122	0	0	0	0	0
Washington Headquarters Services (at)	515,096	126,921	319,968	14,178	16,057	22,518	5,090	1,803	40	8,521

See explanatory information, if any, and SOURCE at end of table.

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 2 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Department of Defense, total										
major systems (ms) ²	26,729,859	5,753,955	20,192,622	57,161	175,844	89,624	6,294	430,182	3,936	20,241
Department of the Army (ms)	3,529,569	1,660,043	1,783,956	2,523	20,485	16,880	2,289	27,744	3,936	11,713
Department of the Navy (ms)	6,803,103	2,482,982	4,128,573	1,443	108,275	13,186	3,711	59,275	0	5,658
Department of the Air Force (ms)	12,678,029	539,140	11,771,017	29,987	5,490	23,376	219	308,370	0	430
Defense Agencies, total (ms)	3,422,834	815,095	2,489,000	23,208	41,594	35,663	75	15,759	0	2,440
Ballistic Missile Def Org (ms)	2,292,389	365,498	1,828,464	21,958	40,058	33,463	75	433	0	2,440
Defense Advanced Rsch Projects Agency (ms)	82,043	38,192	43,851	0	0	0	0	0	0	0
Defense Info Systems Agcy (ms)	55,605	16,790	30,465	0	0	300	0	8,050	0	0
Defense Logistics Agency (ms)	7,814	2,629	4,997	0	0	0	0	188	0	0
Special Operations Command (ms)	68,986	21,019	46,849	950	168	0	0	0	0	0
Washington Headquarters Services (ms)	915,997	370,967	534,374	300	1,368	1,900	0	7,088	0	0
Operational Test & Evaluation, Director (ms)	26,610	4,023	8,167	0	0	519	0	13,901	0	0
Test & Evaluation, Deputy Under Secretary of Defense (ms)	269,714	252,672	11,909	0	0	0	0	5,133	0	0
Department of Education	43,171	2,409	7,215	0	17,059	0	16,311	0	177	0
Department of Energy	2,035,809	257,333	1,056,617	266,753	31,239	283,415	18,887	117,265	3,442	858
Dept of Health & Human Svcs, total	1,559,867	366,949	90,343	19,147	771,772	2,503	276,137	1,222	27,856	3,938
Administration on Aging	4,251	341	0	0	330	0	3,510	0	70	0
Agcy for Hlth Care Policy & Rsch	9,906	9,906	0	0	0	0	0	0	0	0
National Institutes of Health	1,473,332	356,342	90,343	19,147	748,697	2,503	241,739	1,222	9,401	3,938
Office of the Secretary, total	3,296	359	0	0	2,391	0	546	0	0	0
Off of Public Hlth & Science	3,296	359	0	0	2,391	0	546	0	0	0
Substance Abuse & Mental Health Services Administration	69,082	1	0	0	20,354	0	30,342	0	18,385	0
Dept of Housing & Urban Development	22,192	15,667	3,765	0	1,254	0	1,506	0	0	0
Department of the Interior, total	27,246	24,944	1,942	0	330	0	0	0	30	0
Bureau of Reclamation	1,700	1,700	0	0	0	0	0	0	0	0
Geological Survey	25,546	23,244	1,942	0	330	0	0	0	30	0
Department of Justice, total	52,258	37,020	548	0	2,275	0	3,816	0	8,599	0
Bureau of Prisons	2,745	500	0	0	0	0	0	0	2,245	0
Drug Enforcement Administration ³	30	12	18	0	0	0	0	0	0	0
Federal Bureau of Investigation	35,458	35,458	0	0	0	0	0	0	0	0
Office of Justice Programs	14,025	1,050	530	0	2,275	0	3,816	0	6,354	0
Department of Labor, total	13,338	1,292	3,930	0	96	0	2,058	0	5,962	0
Employment & Training Admin	12,616	1,079	3,517	0	0	0	2,058	0	5,962	0
Office of the Secretary	121	25	0	0	96	0	0	0	0	0
Pension Benefit Guaranty Corp	601	188	413	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1997

[Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Department of Transportation, total	145,667	50,106	36,503	0	9,835	0	2,989	0	46,234	0
Coast Guard	17,199	12,374	4,825	0	0	0	0	0	0	0
Federal Aviation Administration	49,677	27,002	22,675	0	0	0	0	0	0	0
Federal Highway Administration	61,142	4,280	7,404	0	2,498	0	726	0	46,234	0
Federal Railroad Administration	650	350	300	0	0	0	0	0	0	0
Federal Transit Administration	11,057	1,357	100	0	7,337	0	2,263	0	0	0
Office of the Secretary	3,526	3,526	0	0	0	0	0	0	0	0
Research & Special Programs Admin ..	2,416	1,217	1,199	0	0	0	0	0	0	0
Department of the Treasury, total	8,825	4,884	3,941	0	0	0	0	0	0	0
Bureau of Engraving & Printing	99	99	0	0	0	0	0	0	0	0
Internal Revenue Service	2,967	1,984	983	0	0	0	0	0	0	0
United States Customs Service ⁴	5,750	2,800	2,950	0	0	0	0	0	0	0
United States Mint	9	1	8	0	0	0	0	0	0	0
Department of Veterans Affairs	21,718	21,718	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	83,091	43,448	12,539	0	18,740	0	7,948	0	211	205
International Development Cooperation Agency, total	29,746	2,746	458	0	1,144	0	25,169	0	0	229
Agency for International Development ⁵	29,746	2,746	458	0	1,144	0	25,169	0	0	229
Library of Congress	1,976	1,976	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	5,142,413	1,285,604	2,871,948	2,715	122,918	636,695	190,765	515	643	30,610
Tennessee Valley Authority ⁶	4,929	4,929	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

³ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-50. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1998**

[Dollars in thousands]

Page 1 of 3

Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by in- dus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Total, all agencies	40,643,574	8,847,051	27,309,025	422,874	1,458,116	905,258	830,720	599,818	141,530	129,182
Departments:										
Department of Agriculture, total	102,586	97,723	0	0	4,235	0	350	0	1	277
Agricultural Marketing Service	598	598	0	0	0	0	0	0	0	0
Agricultural Research Service	64,721	60,858	0	0	3,235	0	350	0	1	277
Animal & Plant Hlth Inspection Svc	19,538	18,538	0	0	1,000	0	0	0	0	0
Food Safety Inspection Service	15	15	0	0	0	0	0	0	0	0
Forest Service	15,512	15,512	0	0	0	0	0	0	0	0
Grain Inspection Packers & Stockyards Administration	2,202	2,202	0	0	0	0	0	0	0	0
Department of Commerce, total	153,032	52,191	80,142	0	6,905	0	8,241	0	5,306	247
Bureau of the Census	1,842	1,842	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	98,132	16,666	80,142	0	228	0	849	0	0	247
Nat'l Oceanic & Atmospheric Admin	30,529	28,755	0	0	1,749	0	0	0	25	0
National Telecommunications & Information Administration	22,529	4,928	0	0	4,928	0	7,392	0	5,281	0
Department of Defense, total ²	30,952,850	6,394,899	23,003,641	115,379	460,677	143,229	260,953	479,100	883	94,089
Department of the Army	4,296,761	1,643,320	2,424,973	10,154	146,476	16,188	7,128	39,717	883	7,922
Department of the Navy	7,234,571	2,570,022	4,395,392	895	127,698	26,510	37,878	61,663	0	14,513
Department of the Air Force	13,112,883	436,100	12,211,006	14,216	8,850	6,124	142,333	293,686	0	568
Defense Agencies, total	6,046,246	1,526,709	3,949,271	89,614	177,653	94,407	73,614	63,892	0	71,086
Ballistic Missile Defense Org	3,083,650	674,855	2,179,501	39,334	67,854	40,014	94	24,060	0	57,938
Defense Advanced Rsch Projects Agency	1,174,462	248,201	739,834	5,824	86,758	30,885	41,129	20,708	0	1,123
Defense Info Systems Agcy	52,095	15,812	29,685	1,006	0	312	0	5,280	0	0
Defense Logistics Agency	102,402	26,855	42,116	0	10,121	0	23,210	100	0	0
Defense Special Weapons Agcy	65,306	7,900	51,506	123	2,841	1,455	758	505	0	218
Joint Staff	53,976	53,976	0	0	0	0	0	0	0	0
Special Operations Command	134,878	40,462	92,530	1,886	0	0	0	0	0	0
Washington Headquarters Services	1,379,477	458,648	814,099	41,441	10,079	21,741	8,423	13,239	0	11,807
Operational Test & Evaluation, Director	27,823	3,834	7,784	500	0	0	0	15,705	0	0
Test & Evaluation, Deputy Under Secretary of Defense	234,566	214,914	15,215	0	0	0	0	4,437	0	0
Department of Defense, total advanced technology (at) ²	4,640,380	1,048,381	2,909,709	30,302	294,891	80,923	119,411	77,758	0	79,005
Department of the Army (at)	818,294	228,640	426,052	6,317	132,005	1,100	4,959	16,567	0	2,654
Department of the Navy (at)	526,212	126,389	318,569	0	21,160	10,136	34,985	7,799	0	7,174
Department of the Air Force (at)	423,081	75,666	328,009	32	6,156	2,866	5,903	4,449	0	0
Defense Agencies, total (at)	2,872,793	617,686	1,837,079	23,953	135,570	66,821	73,564	48,943	0	69,177
Ballistic Missile Def Org (at)	996,666	172,599	708,095	380	26,071	13,740	44	19,708	0	56,029
Defense Advanced Rsch Projects Agency (at)	1,087,071	206,689	693,955	5,824	86,758	30,885	41,129	20,708	0	1,123
Defense Logistics Agency (at)	93,988	24,356	36,301	0	10,121	0	23,210	0	0	0
Def Special Weapons Agcy (at)	65,306	7,900	51,506	123	2,841	1,455	758	505	0	218
Joint Staff (at)	53,976	53,976	0	0	0	0	0	0	0	0
Special Operations Command (at) ...	56,649	16,994	38,863	792	0	0	0	0	0	0
Washington Headquarters Services (at)	519,137	135,172	308,359	16,834	9,779	20,741	8,423	8,022	0	11,807

See explanatory information, if any, and SOURCE at end of table.

Table C-50. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1998

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts	
Department of Defense, total										
major systems (ms) ²	26,312,470	5,346,518	20,093,932	85,077	165,786	62,306	141,542	401,342	883	15,084
Department of the Army (ms)	3,478,467	1,414,680	1,998,921	3,837	14,471	15,088	2,169	23,150	883	5,268
Department of the Navy (ms)	6,708,359	2,443,633	4,076,823	895	106,538	16,374	2,893	53,864	0	7,339
Department of the Air Force (ms)	12,689,802	360,434	11,882,997	14,184	2,694	3,258	136,430	289,237	0	568
Defense Agencies, total (ms)	3,173,453	909,023	2,112,192	65,661	42,083	27,586	50	14,949	0	1,909
Ballistic Missile Def Org (ms)	2,086,984	502,256	1,471,406	38,954	41,783	26,274	50	4,352	0	1,909
Defense Advanced Rsch Projects										
Agency (ms)	87,391	41,512	45,879	0	0	0	0	0	0	0
Defense Info Systems Agcy (ms)	52,095	15,812	29,685	1,006	0	312	0	5,280	0	0
Defense Logistics Agency (ms)	8,414	2,499	5,815	0	0	0	0	100	0	0
Special Operations										
Command (ms)	78,229	23,468	53,667	1,094	0	0	0	0	0	0
Washington Headquarters										
Services (ms)	860,340	323,476	505,740	24,607	300	1,000	0	5,217	0	0
Operational Test & Evaluation,										
Director (ms)	27,823	3,834	7,784	500	0	0	0	15,705	0	0
Test & Evaluation, Deputy Under										
Secretary of Defense (ms)	234,566	214,914	15,215	0	0	0	0	4,437	0	0
Department of Education	56,609	2,565	11,698	0	22,442	0	19,723	0	181	0
Department of Energy	2,084,702	306,243	1,034,781	284,708	34,646	293,633	8,123	119,014	2,771	783
Dept of Health & Human Svcs, total	1,665,921	481,160	85,848	20,403	758,246	2,042	280,987	1,222	31,819	4,194
Administration on Aging	8,041	341	0	0	500	0	5,300	0	1,900	0
Agcy for Hlth Care Policy & Rsch	9,651	9,651	0	0	0	0	0	0	0	0
National Institutes of Health	1,569,456	470,871	85,848	20,403	733,735	2,042	241,739	1,222	9,402	4,194
Office of the Secretary, total	2,783	296	0	0	1,974	0	513	0	0	0
Off of Public Hlth & Science	2,783	296	0	0	1,974	0	513	0	0	0
Substance Abuse & Mental Health										
Services Administration	75,990	1	0	0	22,037	0	33,435	0	20,517	0
Dept of Housing & Urban Development	25,489	17,995	4,333	0	1,428	0	1,733	0	0	0
Department of the Interior, total	30,043	25,948	3,695	0	350	0	0	0	50	0
Bureau of Reclamation	2,209	2,209	0	0	0	0	0	0	0	0
Geological Survey	27,834	23,739	3,695	0	350	0	0	0	50	0
Department of Justice, total	58,024	37,380	1,007	0	7,030	0	7,990	0	4,617	0
Bureau of Prisons	2,817	500	0	0	0	0	0	0	2,317	0
Drug Enforcement Administration ³	8	1	7	0	0	0	0	0	0	0
Federal Bureau of Investigation	35,729	35,729	0	0	0	0	0	0	0	0
Office of Justice Programs	19,470	1,150	1,000	0	7,030	0	7,990	0	2,300	0
Department of Labor, total	26,207	1,371	4,402	0	75	0	4,680	0	15,679	0
Employment & Training Admin	25,509	1,150	4,000	0	0	0	4,680	0	15,679	0
Office of the Secretary	100	25	0	0	75	0	0	0	0	0
Pension Benefit Guaranty Corp	598	196	402	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

**Table C-50. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1998**

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by in- dus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Department of Transportation, total	188,047	65,479	29,278	0	8,475	0	5,359	0	79,456	0
Coast Guard	16,877	12,142	4,735	0	0	0	0	0	0	0
Federal Aviation Administration	56,444	42,120	14,324	0	0	0	0	0	0	0
Federal Highway Administration	96,604	4,087	7,153	0	4,578	0	1,330	0	79,456	0
Federal Railroad Administration	650	350	300	0	0	0	0	0	0	0
Federal Transit Administration	10,257	1,357	974	0	3,897	0	4,029	0	0	0
Office of the Secretary	4,100	4,100	0	0	0	0	0	0	0	0
Research & Special Programs Admin ..	3,115	1,323	1,792	0	0	0	0	0	0	0
Department of the Treasury, total	11,577	4,822	6,755	0	0	0	0	0	0	0
Bureau of Engraving & Printing	89	89	0	0	0	0	0	0	0	0
Internal Revenue Service	2,801	1,896	905	0	0	0	0	0	0	0
United States Customs Service ⁴	8,175	2,800	5,375	0	0	0	0	0	0	0
United States Mint	512	37	475	0	0	0	0	0	0	0
Department of Veterans Affairs	22,679	22,679	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	99,000	47,268	13,641	0	28,992	0	8,647	0	230	222
International Development Cooperation Agency, total	41,220	4,849	486	0	1,697	0	33,946	0	0	242
Agency for International Development ⁵	41,220	4,849	486	0	1,697	0	33,946	0	0	242
Library of Congress	1,868	1,868	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	5,121,480	1,280,371	3,029,318	2,384	122,918	466,354	189,988	482	537	29,128
Tennessee Valley Authority ⁶	2,240	2,240	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

³ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-51. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Total, all agencies	40,340,819	8,852,337	27,044,734	476,711	1,449,381	939,392	685,088	634,087	143,752	115,337
Departments:										
Department of Agriculture, total	104,993	100,852	0	0	3,626	0	213	0	1	301
Agricultural Marketing Service	615	615	0	0	0	0	0	0	0	0
Agricultural Research Service	67,610	64,469	0	0	2,626	0	213	0	1	301
Animal & Plant Hlth Inspection Svc	18,986	17,986	0	0	1,000	0	0	0	0	0
Food Safety Inspection Service	15	15	0	0	0	0	0	0	0	0
Forest Service	15,512	15,512	0	0	0	0	0	0	0	0
Grain Inspection Packers & Stockyards Administration	2,255	2,255	0	0	0	0	0	0	0	0
Department of Commerce, total	185,995	48,453	116,085	0	6,269	0	9,116	0	5,772	300
Bureau of the Census	3,077	3,077	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	135,299	17,548	116,085	0	230	0	1,136	0	0	300
Nat'l Oceanic & Atmospheric Admin	25,619	24,828	0	0	719	0	0	0	72	0
National Telecommunications & Information Administration	22,000	3,000	0	0	5,320	0	7,980	0	5,700	0
Department of Defense, total ²	30,261,504	6,460,877	22,612,767	126,867	290,553	118,719	69,347	503,499	1,003	77,872
Department of the Army	4,088,606	1,571,184	2,416,466	10,100	25,565	17,936	5,662	38,619	0	3,074
Department of the Navy	7,403,098	2,657,106	4,488,431	19,099	102,072	31,785	28,491	69,219	0	6,895
Department of the Air Force	12,843,711	614,914	11,882,751	20,853	2,134	6,748	4,736	310,535	1,003	37
Defense Agencies, total	5,649,777	1,386,546	3,802,535	76,515	160,782	62,250	30,458	62,825	0	67,866
Ballistic Missile Defense Org	3,067,865	661,134	2,217,461	30,515	49,306	30,627	203	18,997	0	59,622
Defense Advanced Rsch Projects Agency	1,002,797	159,471	686,773	1,768	102,689	13,373	22,812	15,234	0	677
Defense Info Systems Agcy	113,239	46,766	55,686	515	0	320	5,609	4,343	0	0
Defense Logistics Agency	54,901	24,005	27,702	0	2,894	200	0	100	0	0
Defense Special Weapons Agcy	52,422	7,118	41,503	18	2,473	672	113	203	0	322
Joint Staff	69,495	69,495	0	0	0	0	0	0	0	0
Special Operations Command	134,105	40,231	93,499	375	0	0	0	0	0	0
Washington Headquarters Services	1,154,953	378,326	679,911	43,324	3,420	17,058	1,721	23,948	0	7,245
Operational Test & Evaluation, Director	25,300	2,634	5,348	300	0	0	0	17,018	0	0
Test & Evaluation, Deputy Under Secretary of Defense	251,012	228,493	17,236	0	0	0	0	5,283	0	0
Department of Defense, total advanced technology (at) ²	3,928,701	795,724	2,696,321	16,792	167,597	54,948	53,955	77,083	0	66,281
Department of the Army (at)	510,501	156,504	318,353	6,263	13,609	1,100	2,662	12,010	0	0
Department of the Navy (at)	464,128	113,704	291,054	0	18,485	9,704	25,575	5,606	0	0
Department of the Air Force (at)	419,536	67,053	338,603	30	1,888	3,520	919	7,486	0	37
Defense Agencies, total (at)	2,534,536	458,463	1,748,311	10,499	133,615	40,624	24,799	51,981	0	66,244
Ballistic Missile Def Org (at)	941,898	142,651	690,737	600	22,739	10,521	153	16,497	0	58,000
Defense Advanced Rsch Projects Agency (at)	911,803	115,808	639,442	1,768	102,689	13,373	22,812	15,234	0	677
Defense Logistics Agency (at)	50,019	23,408	24,017	0	2,594	0	0	0	0	0
Def Special Weapons Agcy (at)	52,422	7,118	41,503	18	2,473	672	113	203	0	322
Joint Staff (at)	69,495	69,495	0	0	0	0	0	0	0	0
Special Operations Command (at)	56,324	16,897	39,269	158	0	0	0	0	0	0
Washington Headquarters Services (at)	452,575	83,086	313,343	7,955	3,120	16,058	1,721	20,047	0	7,245

See explanatory information, if any, and SOURCE at end of table.

Table C-51. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural								Foreign
			United States and territories								
			Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts		
Department of Defense, total											
major systems (ms) ²	26,332,803	5,665,153	19,916,446	110,075	122,956	63,771	15,392	426,416	1,003	11,591	
Department of the Army (ms)	3,578,105	1,414,680	2,098,113	3,837	11,956	16,836	3,000	26,609	0	3,074	
Department of the Navy (ms)	6,938,970	2,543,402	4,197,377	19,099	83,587	22,081	2,916	63,613	0	6,895	
Department of the Air Force (ms)	12,424,175	547,861	11,544,148	20,823	246	3,228	3,817	303,049	1,003	0	
Defense Agencies, total (ms)	3,115,241	928,083	2,054,224	66,016	27,167	21,626	5,659	10,844	0	1,622	
Ballistic Missile Def Org (ms)	2,125,967	518,483	1,526,724	29,915	26,567	20,106	50	2,500	0	1,622	
Defense Advanced Rsch Projects											
Agency (ms)	90,994	43,663	47,331	0	0	0	0	0	0	0	
Defense Info Systems Agcy (ms)	113,239	46,766	55,686	515	0	320	5,609	4,343	0	0	
Defense Logistics Agency (ms)	4,882	597	3,685	0	300	200	0	100	0	0	
Special Operations											
Command (ms)	77,781	23,334	54,230	217	0	0	0	0	0	0	
Washington Headquarters											
Services (ms)	702,378	295,240	366,568	35,369	300	1,000	0	3,901	0	0	
Operational Test & Evaluation,											
Director (ms)	25,300	2,634	5,348	300	0	0	0	17,018	0	0	
Test & Evaluation, Deputy Under											
Secretary of Defense (ms)	251,012	228,493	17,236	0	0	0	0	5,283	0	0	
Department of Education	59,700	2,309	11,072	0	26,475	0	19,665	0	179	0	
Department of Energy	2,412,539	364,512	1,199,258	324,869	44,857	334,879	12,023	128,698	2,664	779	
Dept of Health & Human Svcs, total	1,839,215	431,288	106,648	22,603	907,909	2,955	325,621	1,443	34,315	6,433	
Administration on Aging	9,341	341	0	0	0	0	6,300	0	2,700	0	
Agcy for Hlth Care Policy & Rsch	11,770	11,770	0	0	0	0	0	0	0	0	
National Institutes of Health	1,739,237	418,868	106,648	22,603	883,821	2,955	285,368	1,443	11,098	6,433	
Office of the Secretary, total	2,877	308	0	0	2,051	0	518	0	0	0	
Off of Public Hlth & Science	2,877	308	0	0	2,051	0	518	0	0	0	
Substance Abuse & Mental Health											
Services Administration	75,990	1	0	0	22,037	0	33,435	0	20,517	0	
Dept of Housing & Urban Development ...	32,312	22,812	5,493	0	1,810	0	2,197	0	0	0	
Department of the Interior, total	29,483	27,086	1,942	0	405	0	0	0	50	0	
Bureau of Reclamation	2,550	2,550	0	0	0	0	0	0	0	0	
Geological Survey	26,933	24,536	1,942	0	405	0	0	0	50	0	
Department of Justice, total	50,050	36,777	2,007	0	1,530	0	3,840	0	5,896	0	
Bureau of Prisons	2,896	500	0	0	0	0	0	0	2,396	0	
Drug Enforcement Administration ³	8	1	7	0	0	0	0	0	0	0	
Federal Bureau of Investigation	35,776	35,776	0	0	0	0	0	0	0	0	
Office of Justice Programs	11,370	500	2,000	0	1,530	0	3,840	0	3,500	0	
Department of Labor, total	48,169	2,134	7,547	0	75	0	8,535	0	29,878	0	
Employment & Training Admin	47,422	1,896	7,113	0	0	0	8,535	0	29,878	0	
Office of the Secretary	100	25	0	0	75	0	0	0	0	0	
Pension Benefit Guaranty Corp	647	213	434	0	0	0	0	0	0	0	

See explanatory information, if any, and SOURCE at end of table.

**Table C-51. Preliminary Federal obligations for development, by agency and performer:
fiscal year 1999**

[Dollars in thousands]

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Agency and subdivision	Total	Intra- mural ¹	Extramural							
			United States and territories							Foreign
			Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	
Department of Transportation, total	272,571	55,737	136,277	0	11,672	0	5,663	0	63,222	0
Coast Guard	14,447	10,247	4,200	0	0	0	0	0	0	0
Federal Aviation Administration	133,695	26,610	107,085	0	0	0	0	0	0	0
Federal Highway Administration	109,763	13,320	23,186	0	7,776	0	2,259	0	63,222	0
Federal Railroad Administration	650	350	300	0	0	0	0	0	0	0
Federal Transit Administration	7,790	490	0	0	3,896	0	3,404	0	0	0
Office of the Secretary	3,540	3,540	0	0	0	0	0	0	0	0
Research & Special Programs Admin ..	2,686	1,180	1,506	0	0	0	0	0	0	0
Department of the Treasury, total	11,400	4,838	6,562	0	0	0	0	0	0	0
Bureau of Engraving & Printing	94	94	0	0	0	0	0	0	0	0
Internal Revenue Service	2,931	1,930	1,001	0	0	0	0	0	0	0
United States Customs Service ⁴	8,175	2,800	5,375	0	0	0	0	0	0	0
United States Mint	200	14	186	0	0	0	0	0	0	0
Department of Veterans Affairs	24,817	24,817	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	100,000	47,745	13,779	0	29,285	0	8,734	0	232	225
International Development Cooperation Agency, total	48,494	5,705	571	0	1,997	0	39,936	0	0	285
Agency for International Development ⁵	48,494	5,705	571	0	1,997	0	39,936	0	0	285
Library of Congress	2,000	2,000	0	0	0	0	0	0	0	0
National Aeronautics & Space Admin	4,857,577	1,214,395	2,824,726	2,372	122,918	482,839	180,198	447	540	29,142

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

³ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-52. Federal funds for R&D plant, by agency: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

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Agency and subdivision	Obligations			Outlays		
	1997	Preliminary		1997	Preliminary	
		1998	1999		1998	1999
Total, all agencies	1,914,751	2,088,799	1,997,273	1,994,773	1,931,058	2,038,944
Departments:						
Department of Agriculture, total	184,160	107,117	103,345	122,255	163,303	152,633
Agricultural Research Service	118,945	103,597	100,645	70,906	105,523	110,275
Cooperative State Rsch, Ed, & Extension Svc	63,215	820	0	49,349	55,080	39,658
Forest Service	2,000	2,700	2,700	2,000	2,700	2,700
Department of Commerce, total	43,353	130,475	70,136	70,495	57,542	50,264
National Institute of Standards & Technology	21,758	103,575	56,714	48,900	30,642	36,842
National Oceanic & Atmospheric Administration	21,595	26,900	13,422	21,595	26,900	13,422
Department of Defense, total	85,494	95,007	76,120	52,392	50,480	50,863
Department of the Army, total	4,141	4,062	4,208	4,790	4,311	4,217
Department of the Army, Military Functions	4,141	4,062	4,208	4,790	4,311	4,217
Department of the Navy	37,048	41,620	20,530	16,947	24,851	31,265
Department of the Air Force	39,052	48,947	50,804	25,402	20,940	14,803
Defense Agencies, total	5,253	378	578	5,253	378	578
Ballistic Missile Defense Organization	5,125	250	450	5,125	250	450
Defense Logistics Agency	128	128	128	128	128	128
Department of Education	0	0	0	0	5,000	0
Department of Energy	729,306	759,251	936,786	806,679	827,785	888,509
Department of Health & Human Services, total	260,069	416,734	253,836	120,510	214,018	288,230
Food & Drug Administration	14,515	21,350	5,150	8,666	29,400	20,000
Health Resources & Services Administration	700	700	700	700	700	700
National Institutes of Health	244,854	394,684	247,986	111,144	183,918	267,530
Department of the Interior, total	7,186	2,152	2,152	6,577	2,479	2,252
Geological Survey	4,960	1,160	1,160	4,772	1,234	1,161
Minerals Management Service	2,226	992	992	1,805	1,245	1,091
Department of Transportation, total	19,036	18,632	24,902	20,810	17,450	19,807
Coast Guard	345	260	266	345	260	266
Federal Aviation Administration	17,200	14,290	14,290	18,000	15,000	14,290
Federal Highway Administration	923	3,312	9,716	2,465	1,274	4,662
Federal Railroad Administration	568	770	630	0	916	589
Department of the Treasury, total	125	125	125	125	125	125
United States Customs Service ¹	125	125	125	125	125	125
Department of Veterans Affairs	31,277	1,219	1,200	8,300	7,800	8,500
Other agencies:						
Environmental Protection Agency	25,000	31,000	21,000	22,000	27,000	20,000
General Services Administration	19	1	45	1,630	76	761
National Aeronautics & Space Administration	321,900	312,000	300,900	442,000	310,000	326,000
National Science Foundation	203,826	210,586	202,226	318,000	244,000	227,000
Smithsonian Institution	4,000	4,500	4,500	3,000	4,000	4,000

¹ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-53. Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural								Foreign
			United States and territories								
			Indus-trial firms	FFRDCs admin by indus-trial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts		
Total, all agencies	1,914,751	608,274	389,821	60,536	238,568	548,753	16,737	51,957	0	105,000	
Departments:											
Department of Agriculture, total	184,160	122,841	0	0	61,319	0	0	0	0	0	
Agricultural Research Service	118,945	118,945	0	0	0	0	0	0	0	0	
Cooperative State Research, Education, & Extension Service	63,215	1,896	0	0	61,319	0	0	0	0	0	
Forest Service	2,000	2,000	0	0	0	0	0	0	0	0	
Department of Commerce, total	43,353	43,353	0	0	0	0	0	0	0	0	
Nat'l Inst of Standards & Tech	21,758	21,758	0	0	0	0	0	0	0	0	
Nat'l Oceanic & Atmospheric Admin	21,595	21,595	0	0	0	0	0	0	0	0	
Department of Defense, total	85,494	79,315	6,179	0	0	0	0	0	0	0	
Department of the Army	4,141	4,141	0	0	0	0	0	0	0	0	
Department of the Navy	37,048	36,033	1,015	0	0	0	0	0	0	0	
Department of the Air Force	39,052	38,691	361	0	0	0	0	0	0	0	
Defense Agencies, total	5,253	450	4,803	0	0	0	0	0	0	0	
Ballistic Missile Defense Org	5,125	450	4,675	0	0	0	0	0	0	0	
Defense Logistics Agency	128	0	128	0	0	0	0	0	0	0	
Department of Energy	729,306	63,972	5,631	60,536	13,088	533,938	184	51,957	0	0	
Dept of Health & Human Svcs, total	260,069	237,085	0	0	18,778	0	4,206	0	0	0	
Food & Drug Administration	14,515	14,515	0	0	0	0	0	0	0	0	
Health Resources & Services Admin	700	700	0	0	0	0	0	0	0	0	
National Institutes of Health	244,854	221,870	0	0	18,778	0	4,206	0	0	0	
Department of the Interior, total	7,186	159	7,027	0	0	0	0	0	0	0	
Geological Survey	4,960	0	4,960	0	0	0	0	0	0	0	
Minerals Management Service	2,226	159	2,067	0	0	0	0	0	0	0	
Department of Transportation, total	19,036	17,200	923	0	345	0	568	0	0	0	
Coast Guard	345	0	0	0	345	0	0	0	0	0	
Federal Aviation Administration	17,200	17,200	0	0	0	0	0	0	0	0	
Federal Highway Administration	923	0	923	0	0	0	0	0	0	0	
Federal Railroad Administration	568	0	0	0	0	0	568	0	0	0	
Department of the Treasury, total	125	0	125	0	0	0	0	0	0	0	
United States Customs Service ²	125	0	125	0	0	0	0	0	0	0	
Department of Veterans Affairs	31,277	31,277	0	0	0	0	0	0	0	0	
Other agencies:											
Environmental Protection Agency	25,000	0	25,000	0	0	0	0	0	0	0	
General Services Administration	19	0	0	0	19	0	0	0	0	0	
National Aeronautics & Space Admin	321,900	7,596	314,304	0	0	0	0	0	0	0	
National Science Foundation	203,826	1,476	30,632	0	145,019	14,815	11,779	0	0	105,000	
Smithsonian Institution	4,000	4,000	0	0	0	0	0	0	0	0	

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-54. Preliminary Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 1998

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by indus-trial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Total, all agencies	2,088,799	819,764	381,517	36,619	180,142	634,777	16,391	19,481	0	108
Departments:										
Department of Agriculture, total	107,117	106,297	0	0	820	0	0	0	0	0
Agricultural Research Service	103,597	103,597	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	820	0	0	0	820	0	0	0	0	0
Forest Service	2,700	2,700	0	0	0	0	0	0	0	0
Department of Commerce, total	130,475	130,475	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	103,575	103,575	0	0	0	0	0	0	0	0
Nat'l Oceanic & Atmospheric Admin	26,900	26,900	0	0	0	0	0	0	0	0
Department of Defense, total	95,007	92,675	2,332	0	0	0	0	0	0	0
Department of the Army	4,062	4,062	0	0	0	0	0	0	0	0
Department of the Navy	41,620	39,760	1,860	0	0	0	0	0	0	0
Department of the Air Force	48,947	48,603	344	0	0	0	0	0	0	0
Defense Agencies, total	378	250	128	0	0	0	0	0	0	0
Ballistic Missile Defense Org	250	250	0	0	0	0	0	0	0	0
Defense Logistics Agency	128	0	128	0	0	0	0	0	0	0
Department of Energy	759,251	67,497	6,501	36,619	9,683	619,470	0	19,481	0	0
Dept of Health & Human Svcs, total	416,734	393,734	0	0	19,550	0	3,450	0	0	0
Food & Drug Administration	21,350	21,350	0	0	0	0	0	0	0	0
Health Resources & Services Admin	700	700	0	0	0	0	0	0	0	0
National Institutes of Health	394,684	371,684	0	0	19,550	0	3,450	0	0	0
Department of the Interior, total	2,152	192	1,960	0	0	0	0	0	0	0
Geological Survey	1,160	0	1,160	0	0	0	0	0	0	0
Minerals Management Service	992	192	800	0	0	0	0	0	0	0
Department of Transportation, total	18,632	14,290	3,312	0	260	0	770	0	0	0
Coast Guard	260	0	0	0	260	0	0	0	0	0
Federal Aviation Administration	14,290	14,290	0	0	0	0	0	0	0	0
Federal Highway Administration	3,312	0	3,312	0	0	0	0	0	0	0
Federal Railroad Administration	770	0	0	0	0	0	770	0	0	0
Department of the Treasury, total	125	0	125	0	0	0	0	0	0	0
United States Customs Service ²	125	0	125	0	0	0	0	0	0	0
Department of Veterans Affairs	1,219	1,219	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	31,000	0	31,000	0	0	0	0	0	0	0
General Services Administration	1	0	0	0	0	0	1	0	0	0
National Aeronautics & Space Admin	312,000	7,360	304,640	0	0	0	0	0	0	0
National Science Foundation	210,586	1,525	31,647	0	149,829	15,307	12,170	0	0	108
Smithsonian Institution	4,500	4,500	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-55. Preliminary Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Intra-mural ¹	Extramural							
			United States and territories							Foreign
			Indus-trial firms	FFRDCs admin by indus-trial firms	Univer-sities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by non-profit institutions	State and local govts	
Total, all agencies	1,997,273	582,339	369,834	196,827	173,063	643,429	15,767	15,910	0	104
Departments:										
Department of Agriculture, total	103,345	103,345	0	0	0	0	0	0	0	0
Agricultural Research Service	100,645	100,645	0	0	0	0	0	0	0	0
Forest Service	2,700	2,700	0	0	0	0	0	0	0	0
Department of Commerce, total	70,136	70,136	0	0	0	0	0	0	0	0
Nat'l Inst of Standards & Tech	56,714	56,714	0	0	0	0	0	0	0	0
Nat'l Oceanic & Atmospheric Admin	13,422	13,422	0	0	0	0	0	0	0	0
Department of Defense, total	76,120	73,292	2,828	0	0	0	0	0	0	0
Department of the Army	4,208	4,208	0	0	0	0	0	0	0	0
Department of the Navy	20,530	18,530	2,000	0	0	0	0	0	0	0
Department of the Air Force	50,804	50,554	250	0	0	0	0	0	0	0
Defense Agencies, total	578	0	578	0	0	0	0	0	0	0
Ballistic Missile Defense Org	450	0	450	0	0	0	0	0	0	0
Defense Logistics Agency	128	0	128	0	0	0	0	0	0	0
Department of Energy	936,786	76,031	9,967	196,827	9,321	628,730	0	15,910	0	0
Dept of Health & Human Svcs, total	253,836	230,836	0	0	19,550	0	3,450	0	0	0
Food & Drug Administration	5,150	5,150	0	0	0	0	0	0	0	0
Health Resources & Services Admin ...	700	700	0	0	0	0	0	0	0	0
National Institutes of Health	247,986	224,986	0	0	19,550	0	3,450	0	0	0
Department of the Interior, total	2,152	192	1,960	0	0	0	0	0	0	0
Geological Survey	1,160	0	1,160	0	0	0	0	0	0	0
Minerals Management Service	992	192	800	0	0	0	0	0	0	0
Department of Transportation, total	24,902	14,290	9,716	0	266	0	630	0	0	0
Coast Guard	266	0	0	0	266	0	0	0	0	0
Federal Aviation Administration	14,290	14,290	0	0	0	0	0	0	0	0
Federal Highway Administration	9,716	0	9,716	0	0	0	0	0	0	0
Federal Railroad Administration	630	0	0	0	0	0	630	0	0	0
Department of the Treasury, total	125	0	125	0	0	0	0	0	0	0
United States Customs Service ²	125	0	125	0	0	0	0	0	0	0
Department of Veterans Affairs	1,200	1,200	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency	21,000	0	21,000	0	0	0	0	0	0	0
General Services Administration	45	0	0	0	45	0	0	0	0	0
National Aeronautics & Space Admin	300,900	7,053	293,847	0	0	0	0	0	0	0
National Science Foundation	202,226	1,464	30,391	0	143,881	14,699	11,687	0	0	104
Smithsonian Institution	4,500	4,500	0	0	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-56. Federal obligations for research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

Page 1 of 1

Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	10,780,033	11,336,203	12,227,992
Life sciences, total	6,566,059	7,014,735	7,522,981
Biological (excluding environmental)	3,500,584	NA	NA
Environmental biology	146,578	NA	NA
Agricultural	173,082	NA	NA
Medical	2,537,336	NA	NA
Life sciences, n.e.c.	208,479	NA	NA
Psychology, total	283,399	293,098	317,522
Biological aspects	25,103	NA	NA
Social aspects	14,129	NA	NA
Psychological sciences, n.e.c.	244,167	NA	NA
Physical sciences, total	1,163,863	1,187,875	1,247,608
Astronomy	168,004	NA	NA
Chemistry	340,896	NA	NA
Physics	522,066	NA	NA
Physical sciences, n.e.c.	132,897	NA	NA
Environmental sciences, total	672,091	687,611	723,741
Atmospheric	205,787	NA	NA
Geological	124,194	NA	NA
Oceanography	215,405	NA	NA
Environmental sciences, n.e.c.	126,705	NA	NA
Mathematics & computer sciences, total	571,595	590,758	723,611
Mathematics	118,167	NA	NA
Computer sciences	429,357	NA	NA
Mathematics & computer sciences, n.e.c.	24,071	NA	NA
Engineering, total	988,013	984,501	1,082,036
Aeronautical	49,321	NA	NA
Astronautical	17,567	NA	NA
Chemical	62,679	NA	NA
Civil	45,100	NA	NA
Electrical	146,348	NA	NA
Mechanical	76,197	NA	NA
Metallurgy & materials	261,206	NA	NA
Engineering, n.e.c.	329,595	NA	NA
Social sciences, total	197,440	225,194	225,758
Anthropology	10,794	NA	NA
Economics	58,675	NA	NA
Political science	5,389	NA	NA
Sociology	14,521	NA	NA
Social sciences, n.e.c.	108,061	NA	NA
Other sciences, n.e.c.	337,573	352,431	384,735

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal years 1997, 1998, and 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-57. Federal obligations for research performed at universities and colleges,
by selected agency and field of science and engineering: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	10,780,033	6,566,059	283,399	1,163,863	672,091	571,595	988,013	197,440	337,573
Departments:									
Department of Agriculture, total	436,657	334,965	0	26,360	4,665	203	18,150	52,314	0
Agricultural Marketing Service	181	181	0	0	0	0	0	0	0
Agricultural Research Service	28,790	25,273	0	2,834	202	23	458	0	0
Cooperative State Research, Education, & Extension Service	390,870	297,236	0	23,526	2,925	0	17,383	49,800	0
Economic Research Service	1,334	0	0	0	0	0	0	1,334	0
Foreign Agricultural Service	524	524	0	0	0	0	0	0	0
Forest Service	14,823	11,751	0	0	1,538	45	309	1,180	0
Nat'l Agricultural Statistics Svc	135	0	0	0	0	135	0	0	0
Department of Defense, total	945,452	95,940	20,606	104,230	97,642	240,246	382,396	38	4,354
Department of the Army	100,524	28,514	2,267	12,027	5,933	10,723	39,980	38	1,042
Department of the Navy	231,751	17,403	12,302	24,238	62,707	19,359	95,607	0	135
Department of the Air Force	80,434	7,390	669	21,650	3,554	14,998	30,532	0	1,641
Defense Agencies, total	532,743	42,633	5,368	46,315	25,448	195,166	216,277	0	1,536
Ballistic Missile Defense Org	7,220	0	0	0	0	0	7,220	0	0
Defense Adv Rsch Projects Agcy	259,721	10,247	0	3,379	102	159,408	85,820	0	765
Defense Special Weapons Agcy	8,632	0	0	0	7,660	0	340	0	632
Special Operations Command	464	0	0	0	0	0	325	0	139
Washington Headquarters Services	256,706	32,386	5,368	42,936	17,686	35,758	122,572	0	0
Department of Energy	552,213	72,570	0	323,158	69,850	9,681	70,684	0	6,270
Dept of Health & Human Svcs, total	6,430,508	5,717,283	253,532	95,191	17,109	21,611	47,548	69,981	208,253
Administration on Aging	90	0	0	0	0	0	0	90	0
Admin for Children & Families	10,191	0	0	0	0	0	0	10,191	0
Agcy for Hlth Care Policy & Rsch	39,782	32,387	376	0	0	2,194	0	3,648	1,177
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,177	11,177	0	0	0	0	0	0	0
Health Care Financing Admin	5,754	5,754	0	0	0	0	0	0	0
Health Resources & Services Admin	8,016	8,016	0	0	0	0	0	0	0
National Institutes of Health	6,308,572	5,615,648	253,156	95,191	17,109	19,417	47,548	53,427	207,076
Office of the Secretary, total	2,625	0	0	0	0	0	0	2,625	0
Office of the Asst Secretary, Planning & Evaluation	2,625	0	0	0	0	0	0	2,625	0
Other agencies:									
National Aeronautics & Space Admin	596,090	56,216	4,970	221,863	173,686	22,746	91,427	191	24,991
National Science Foundation	1,819,113	289,085	4,291	393,061	309,139	277,108	377,808	74,916	93,705

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-58. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	11,336,203	7,014,735	293,098	1,187,875	687,611	590,758	984,501	225,194	352,431
Departments:									
Department of Agriculture, total	449,458	330,000	0	26,665	4,787	292	18,061	69,653	0
Agricultural Research Service	32,704	28,690	0	3,232	231	26	525	0	0
Cooperative State Research, Education, & Extension Service	382,764	289,111	0	23,433	2,985	0	17,227	50,008	0
Economic Research Service	18,468	0	0	0	0	0	0	18,468	0
Foreign Agricultural Service	524	524	0	0	0	0	0	0	0
Forest Service	14,823	11,675	0	0	1,571	91	309	1,177	0
Nat'l Agricultural Statistics Svc	175	0	0	0	0	175	0	0	0
Department of Defense, total	933,156	113,107	11,174	105,201	90,483	240,732	368,833	55	3,571
Department of the Army	118,135	45,008	1,550	12,196	12,334	9,551	37,406	55	35
Department of the Navy	215,232	14,011	8,283	30,890	64,778	14,685	82,585	0	0
Department of the Air Force	89,245	10,002	159	21,961	162	19,194	35,644	0	2,123
Defense Agencies, total	510,544	44,086	1,182	40,154	13,209	197,302	213,198	0	1,413
Ballistic Missile Defense Org	5,372	0	0	0	0	0	5,372	0	0
Defense Adv Rsch Projects Agcy	270,489	18,887	0	5,409	110	166,228	79,855	0	0
Defense Special Weapons Agcy	1,512	0	0	0	0	0	99	0	1,413
Special Operations Command	445	0	0	0	0	0	445	0	0
Washington Headquarters Services	232,726	25,199	1,182	34,745	13,099	31,074	127,427	0	0
Department of Energy	549,541	77,108	0	320,740	77,651	10,855	61,623	0	1,564
Dept of Health & Human Svcs, total	6,899,782	6,132,132	271,683	102,304	18,293	23,314	50,813	76,800	224,443
Administration on Aging	200	0	0	0	0	0	0	200	0
Admin for Children & Families	12,545	0	0	0	0	0	0	12,545	0
Agcy for Hlth Care Policy & Rsch	38,517	31,199	0	0	0	2,311	0	3,467	1,540
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,200	11,200	0	0	0	0	0	0	0
Health Care Financing Admin	6,607	6,607	0	0	0	0	0	0	0
Health Resources & Services Admin	8,256	8,256	0	0	0	0	0	0	0
National Institutes of Health	6,775,156	6,030,569	271,683	102,304	18,293	21,003	50,813	57,588	222,903
Office of the Secretary, total	3,000	0	0	0	0	0	0	3,000	0
Office of the Asst Secretary, Planning & Evaluation	3,000	0	0	0	0	0	0	3,000	0
Other agencies:									
National Aeronautics & Space Admin	596,090	58,533	5,726	219,880	171,109	24,046	91,539	254	25,003
National Science Foundation	1,908,176	303,855	4,515	413,085	325,288	291,519	393,632	78,432	97,850

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-59. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	12,227,992	7,522,981	317,522	1,247,608	723,741	723,611	1,082,036	225,758	384,735
Departments:									
Department of Agriculture, total	399,709	309,268	0	23,434	4,094	311	16,201	46,401	0
Agricultural Research Service	26,556	23,296	0	2,625	187	21	427	0	0
Cooperative State Research, Education, & Extension Service	355,387	273,773	0	20,809	2,336	0	15,465	43,004	0
Economic Research Service	2,220	0	0	0	0	0	0	2,220	0
Foreign Agricultural Service	524	524	0	0	0	0	0	0	0
Forest Service	14,823	11,675	0	0	1,571	91	309	1,177	0
Nat'l Agricultural Statistics Svc	199	0	0	0	0	199	0	0	0
Department of Defense, total	1,082,658	118,480	13,800	112,142	88,915	333,890	407,887	89	7,455
Department of the Army	98,900	16,004	3,594	16,231	6,749	12,794	43,407	89	32
Department of the Navy	237,243	15,628	9,285	34,822	71,624	16,498	89,386	0	0
Department of the Air Force	105,003	14,999	83	21,286	223	20,831	41,631	0	5,950
Defense Agencies, total	641,512	71,849	838	39,803	10,319	283,767	233,463	0	1,473
Ballistic Missile Defense Org	4,078	0	0	500	0	500	3,078	0	0
Defense Adv Rsch Projects Agcy	389,380	31,176	0	7,122	0	250,891	100,191	0	0
Defense Special Weapons Agcy	1,487	0	0	0	0	0	14	0	1,473
Special Operations Command	500	0	0	0	0	0	500	0	0
Washington Headquarters Services	246,067	40,673	838	32,181	10,319	32,376	129,680	0	0
Department of Energy	552,825	83,348	0	316,166	73,039	11,141	69,131	0	0
Dept of Health & Human Svcs, total	7,446,857	6,610,784	292,904	110,295	19,722	25,469	54,782	90,705	242,196
Administration on Aging	500	0	0	0	0	0	0	500	0
Admin for Children & Families	20,881	0	0	0	0	0	0	20,881	0
Agcy for Hlth Care Policy & Rsch	47,083	38,137	0	0	0	2,825	0	4,237	1,884
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,900	11,900	0	0	0	0	0	0	0
Health Care Financing Admin	6,605	6,605	0	0	0	0	0	0	0
Health Resources & Services Admin	8,256	8,256	0	0	0	0	0	0	0
National Institutes of Health	7,304,331	6,501,585	292,904	110,295	19,722	22,644	54,782	62,087	240,312
Office of the Secretary, total	3,000	0	0	0	0	0	0	3,000	0
Office of the Asst Secretary, Planning & Evaluation	3,000	0	0	0	0	0	0	3,000	0
Other agencies:									
National Aeronautics & Space Admin	596,090	58,533	5,726	219,880	171,109	24,046	91,539	254	25,003
National Science Foundation	2,149,853	342,568	5,092	465,691	366,862	328,754	442,496	88,309	110,081

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-60. Federal obligations for research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Psychology				Life sciences					
	Total	Bio-logical aspects	Social aspects	Psycho-logical sciences, n.e.c.	Total	Bio-logical	Environ-mental biology	Agri-cultural	Medical	Life sciences, n.e.c.
Total, all agencies	283,399	25,103	14,129	244,167	6,566,059	3,500,584	146,578	173,082	2,537,336	208,479
Departments:										
Department of Agriculture, total	0	0	0	0	334,965	89,396	66,220	171,058	8,291	0
Agricultural Marketing Service	0	0	0	0	181	0	0	181	0	0
Agricultural Research Service	0	0	0	0	25,273	1,786	3,036	19,986	465	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	297,236	80,403	58,640	150,367	7,826	0
Foreign Agricultural Service	0	0	0	0	524	0	0	524	0	0
Forest Service	0	0	0	0	11,751	7,207	4,544	0	0	0
Department of Defense, total	20,606	14,977	4,591	1,038	95,940	37,799	5,084	1,389	50,428	1,240
Department of the Army	2,267	0	2,257	10	28,514	2,219	0	0	25,908	387
Department of the Navy	12,302	11,274	0	1,028	17,403	6,164	4,931	0	5,455	853
Department of the Air Force	669	0	669	0	7,390	7,237	153	0	0	0
Defense Agencies, total	5,368	3,703	1,665	0	42,633	22,179	0	1,389	19,065	0
Defense Adv Rsch Projects Agcy	0	0	0	0	10,247	8,266	0	0	1,981	0
Washington Headquarters Services	5,368	3,703	1,665	0	32,386	13,913	0	1,389	17,084	0
Department of Energy	0	0	0	0	72,570	42,145	0	0	29,968	457
Dept of Health & Human Svcs, total	253,532	10,126	5,093	238,313	5,717,283	3,090,070	0	0	2,443,360	183,853
Agcy for Hlth Care Policy & Rsch	376	0	30	346	32,387	28	0	0	31,495	864
Centers for Disease Control & Prevention	0	0	0	0	44,301	0	0	0	44,301	0
Food & Drug Administration	0	0	0	0	11,177	11,177	0	0	0	0
Health Care Financing Admin	0	0	0	0	5,754	0	0	0	0	5,754
Health Resources & Services Admin	0	0	0	0	8,016	0	0	0	8,016	0
National Institutes of Health	253,156	10,126	5,063	237,967	5,615,648	3,078,865	0	0	2,359,548	177,235
Other agencies:										
National Aeronautics & Space Admin	4,970	0	154	4,816	56,216	26,473	890	635	5,289	22,929
National Science Foundation	4,291	0	4,291	0	289,085	214,701	74,384	0	0	0

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-61. Federal obligations for research performed at universities and colleges
in physical and environmental sciences, by selected agency and
detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chemistry	Physics	Physical sciences, n.e.c.	Total	Atmospheric	Geological	Oceanography	Environmental sciences, n.e.c.
Total, all agencies	1,163,863	168,004	340,896	522,066	132,897	672,091	205,787	124,194	215,405	126,705
Departments:										
Department of Agriculture, total	26,360	0	26,236	124	0	4,665	4,223	442	0	0
Agricultural Research Service	2,834	0	2,710	124	0	202	194	8	0	0
Cooperative State Research, Education, & Extension Service	23,526	0	23,526	0	0	2,925	2,925	0	0	0
Forest Service	0	0	0	0	0	1,538	1,104	434	0	0
Department of Defense, total	104,230	153	39,477	54,923	9,677	97,642	19,686	6,280	50,740	20,936
Department of the Army	12,027	0	5,595	5,680	752	5,933	2,647	1,248	0	2,038
Department of the Navy	24,238	0	10,946	8,361	4,931	62,707	9,831	3,083	38,765	11,028
Department of the Air Force	21,650	153	2,109	19,321	67	3,554	3,344	0	0	210
Defense Agencies, total	46,315	0	20,827	21,561	3,927	25,448	3,864	1,949	11,975	7,660
Defense Adv Rsch Projects Agcy	3,379	0	155	687	2,537	102	0	0	102	0
Defense Special Weapons Agcy	0	0	0	0	0	7,660	0	0	0	7,660
Washington Headquarters Services	42,936	0	20,672	20,874	1,390	17,686	3,864	1,949	11,873	0
Department of Energy	323,158	0	45,523	276,898	737	69,850	19,373	20,857	4,137	25,483
Dept of Health & Human Svcs, total	95,191	0	91,929	3,262	0	17,109	0	0	0	17,109
National Institutes of Health	95,191	0	91,929	3,262	0	17,109	0	0	0	17,109
Other agencies:										
National Aeronautics & Space Admin	221,863	128,833	12,038	61,085	19,907	173,686	95,889	15,098	11,711	50,988
National Science Foundation	393,061	39,018	125,693	125,774	102,576	309,139	66,616	81,517	148,817	12,189

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-62. Federal obligations for research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	988,013	49,321	17,567	62,679	45,100	146,348	76,197	261,206	329,595
Departments:									
Department of Agriculture, total	18,150	0	0	254	60	25	24	0	17,787
Agricultural Research Service	458	0	0	254	60	25	24	0	95
Cooperative State Research, Education, & Extension Service	17,383	0	0	0	0	0	0	0	17,383
Forest Service	309	0	0	0	0	0	0	0	309
Department of Defense, total	382,396	15,017	6,181	6,162	5,602	94,556	49,693	118,798	86,387
Department of the Army	39,980	4,704	35	1,594	4,321	12,977	6,591	7,995	1,763
Department of the Navy	95,607	2,609	0	314	0	25,089	15,898	25,021	26,676
Department of the Air Force	30,532	2,724	2,641	0	404	9,861	237	4,047	10,618
Defense Agencies, total	216,277	4,980	3,505	4,254	877	46,629	26,967	81,735	47,330
Ballistic Missile Defense Org	7,220	1,843	0	0	0	2,826	0	2,551	0
Defense Adv Rsch Projects Agcy	85,820	122	0	0	0	2,429	0	45,352	37,917
Defense Special Weapons Agcy	340	0	0	0	0	100	240	0	0
Special Operations Command	325	0	0	0	0	0	0	0	325
Washington Headquarters Services	122,572	3,015	3,505	4,254	877	41,274	26,727	33,832	9,088
Department of Energy	70,684	0	0	16,259	3,152	2,035	9,967	24,884	14,387
Dept of Health & Human Svcs, total	47,548	0	0	0	0	0	0	0	47,548
National Institutes of Health	47,548	0	0	0	0	0	0	0	47,548
Other agencies:									
National Aeronautics & Space Admin	91,427	34,304	11,386	1,755	209	8,246	9,583	12,140	13,804
National Science Foundation	377,808	0	0	38,249	36,077	41,486	6,930	105,384	149,682

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-63. Federal obligations for research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	571,595	118,167	429,357	24,071	197,440	10,794	58,675	5,389	14,521	108,061
Departments:										
Department of Agriculture, total	203	203	0	0	52,314	0	43,155	0	9,159	0
Agricultural Research Service	23	23	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	49,800	0	40,817	0	8,983	0
Economic Research Service	0	0	0	0	1,334	0	1,334	0	0	0
Forest Service	45	45	0	0	1,180	0	1,004	0	176	0
Nat'l Agricultural Statistics Svc	135	135	0	0	0	0	0	0	0	0
Department of Defense, total	240,246	20,263	200,499	19,484	38	0	25	0	13	0
Department of the Army	10,723	2,731	7,992	0	38	0	25	0	13	0
Department of the Navy	19,359	8,630	10,729	0	0	0	0	0	0	0
Department of the Air Force	14,998	669	1,073	13,256	0	0	0	0	0	0
Defense Agencies, total	195,166	8,233	180,705	6,228	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	159,408	1,248	158,130	30	0	0	0	0	0	0
Washington Headquarters Services	35,758	6,985	22,575	6,198	0	0	0	0	0	0
Department of Energy	9,681	7,297	2,384	0	0	0	0	0	0	0
Dept of Health & Human Svcs, total	21,611	9,701	11,910	0	69,981	32	1,209	0	726	68,014
Administration on Aging	0	0	0	0	90	0	0	0	0	90
Admin for Children & Families	0	0	0	0	10,191	0	0	0	0	10,191
Agcy for Hlth Care Policy & Rsch	2,194	381	1,813	0	3,648	32	1,209	0	726	1,681
National Institutes of Health	19,417	9,320	10,097	0	53,427	0	0	0	0	53,427
Office of the Secretary, total	0	0	0	0	2,625	0	0	0	0	2,625
Office of the Asst Secretary, Planning & Evaluation	0	0	0	0	2,625	0	0	0	0	2,625
Other agencies:										
National Aeronautics & Space Admin	22,746	841	17,318	4,587	191	0	0	0	52	139
National Science Foundation	277,108	79,862	197,246	0	74,916	10,762	14,286	5,389	4,571	39,908

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-64. Federal obligations for basic research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

Page 1 of 1

Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	7,662,933	8,032,091	8,727,937
Life sciences, total	4,348,389	4,636,544	5,064,165
Biological (excluding environmental)	2,425,524	NA	NA
Environmental biology	95,015	NA	NA
Agricultural	85,694	NA	NA
Medical	1,607,897	NA	NA
Life sciences, n.e.c.	134,259	NA	NA
Psychology, total	194,907	199,395	218,214
Biological aspects	21,197	NA	NA
Social aspects	9,421	NA	NA
Psychological sciences, n.e.c.	164,289	NA	NA
Physical sciences, total	1,041,915	1,060,777	1,114,734
Astronomy	153,329	NA	NA
Chemistry	278,566	NA	NA
Physics	489,058	NA	NA
Physical sciences, n.e.c.	120,962	NA	NA
Environmental sciences, total	620,507	637,178	678,022
Atmospheric	190,317	NA	NA
Geological	122,722	NA	NA
Oceanography	203,701	NA	NA
Environmental sciences, n.e.c.	103,767	NA	NA
Mathematics & computer sciences, total	400,983	413,012	467,338
Mathematics	112,530	NA	NA
Computer sciences	268,660	NA	NA
Mathematics & computer sciences, n.e.c.	19,793	NA	NA
Engineering, total	698,888	706,767	768,957
Aeronautical	35,738	NA	NA
Astronautical	10,712	NA	NA
Chemical	38,592	NA	NA
Civil	30,038	NA	NA
Electrical	120,885	NA	NA
Mechanical	69,961	NA	NA
Metallurgy & materials	203,630	NA	NA
Engineering, n.e.c.	189,332	NA	NA
Social sciences, total	117,212	123,168	134,270
Anthropology	10,214	NA	NA
Economics	23,884	NA	NA
Political science	4,829	NA	NA
Sociology	6,339	NA	NA
Social sciences, n.e.c.	71,946	NA	NA
Other sciences, n.e.c.	240,132	255,250	282,237

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal years 1997, 1998, and 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-65. Federal obligations for basic research performed at universities and colleges,
by selected agency and field of science and engineering: fiscal year 1997**

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	7,662,933	4,348,389	194,907	1,041,915	620,507	400,983	698,888	117,212	240,132
Departments:									
Department of Agriculture, total	194,475	161,069	0	11,897	1,753	26	5,355	14,375	0
Agricultural Research Service	16,768	15,090	0	1,400	108	10	160	0	0
Cooperative State Research, Education, & Extension Service	172,332	141,620	0	10,497	1,163	0	5,088	13,964	0
Foreign Agricultural Service	235	235	0	0	0	0	0	0	0
Forest Service	5,140	4,124	0	0	482	16	107	411	0
Department of Defense, total	558,027	43,091	17,205	86,499	70,900	86,903	251,653	0	1,776
Department of the Army	62,689	6,174	1,414	11,921	4,350	8,561	30,269	0	0
Department of the Navy	171,926	15,615	11,713	24,096	50,138	18,699	51,530	0	135
Department of the Air Force	60,695	7,390	0	17,593	216	12,835	21,020	0	1,641
Defense Agencies, total	262,717	13,912	4,078	32,889	16,196	46,808	148,834	0	0
Ballistic Missile Defense Org	3,939	0	0	0	0	0	3,939	0	0
Defense Adv Rsch Projects Agcy	40,531	0	0	155	0	14,453	25,923	0	0
Washington Headquarters Services	218,247	13,912	4,078	32,734	16,196	32,355	118,972	0	0
Department of Energy	459,362	42,602	0	298,288	66,947	9,681	41,769	0	75
Dept of Health & Human Svcs, total	4,241,826	3,775,910	170,220	64,005	11,504	13,056	31,971	35,924	139,236
National Institutes of Health	4,241,826	3,775,910	170,220	64,005	11,504	13,056	31,971	35,924	139,236
Other agencies:									
National Aeronautics & Space Admin	519,823	45,645	3,244	201,551	163,271	18,113	67,503	191	20,305
National Science Foundation	1,689,420	280,072	4,238	379,675	306,132	273,204	300,637	66,722	78,740

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-66. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	8,032,091	4,636,544	199,395	1,060,777	637,178	413,012	706,767	123,168	255,250
Departments:									
Department of Agriculture, total	186,341	153,753	0	11,647	1,811	43	5,150	13,937	0
Agricultural Research Service	18,688	16,818	0	1,560	121	11	178	0	0
Cooperative State Research, Education, & Extension Service	162,278	132,652	0	10,087	1,145	0	4,865	13,529	0
Foreign Agricultural Service	235	235	0	0	0	0	0	0	0
Forest Service	5,140	4,048	0	0	545	32	107	408	0
Department of Defense, total	538,269	39,021	8,481	90,805	66,405	80,957	250,477	0	2,123
Department of the Army	58,815	5,183	511	11,809	4,125	8,185	29,002	0	0
Department of the Navy	158,748	12,240	7,699	30,750	50,069	14,033	43,957	0	0
Department of the Air Force	77,858	9,878	0	19,963	162	18,684	27,048	0	2,123
Defense Agencies, total	242,848	11,720	271	28,283	12,049	40,055	150,470	0	0
Ballistic Missile Defense Org	2,342	0	0	0	0	0	2,342	0	0
Defense Adv Rsch Projects Agcy	34,841	0	0	219	0	11,381	23,241	0	0
Washington Headquarters Services	205,665	11,720	271	28,064	12,049	28,674	124,887	0	0
Department of Energy	451,997	46,989	0	290,240	71,104	10,855	32,809	0	0
Dept of Health & Human Svcs, total	4,557,114	4,056,289	182,740	68,812	12,304	14,127	34,178	38,735	149,929
National Institutes of Health	4,557,114	4,056,289	182,740	68,812	12,304	14,127	34,178	38,735	149,929
Other agencies:									
National Aeronautics & Space Admin	519,823	45,645	3,712	199,568	163,271	19,413	67,655	254	20,305
National Science Foundation	1,778,547	294,847	4,462	399,705	322,283	287,617	316,498	70,242	82,893

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-67. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	8,727,937	5,064,165	218,214	1,114,734	678,022	467,338	768,957	134,270	282,237
Departments:									
Department of Agriculture, total	182,582	152,412	0	10,817	1,598	41	4,908	12,806	0
Agricultural Research Service	15,175	13,656	0	1,267	98	9	145	0	0
Cooperative State Research, Education, & Extension Service	162,032	134,473	0	9,550	955	0	4,656	12,398	0
Foreign Agricultural Service	235	235	0	0	0	0	0	0	0
Forest Service	5,140	4,048	0	0	545	32	107	408	0
Department of Defense, total	617,901	68,917	11,432	95,724	71,876	97,004	266,998	0	5,950
Department of the Army	73,896	7,442	1,911	13,885	4,869	9,441	36,348	0	0
Department of the Navy	179,028	13,803	8,683	34,678	56,465	15,826	49,573	0	0
Department of the Air Force	91,803	14,999	0	18,059	223	20,516	32,056	0	5,950
Defense Agencies, total	273,174	32,673	838	29,102	10,319	51,221	149,021	0	0
Ballistic Missile Defense Org	100	0	0	0	0	0	100	0	0
Defense Adv Rsch Projects Agcy	39,636	0	0	0	0	19,604	20,032	0	0
Washington Headquarters Services	233,438	32,673	838	29,102	10,319	31,617	128,889	0	0
Department of Energy	462,879	68,785	0	283,191	64,411	11,141	35,351	0	0
Dept of Health & Human Svcs, total	4,938,571	4,395,822	198,037	74,572	13,334	15,310	37,039	41,978	162,479
National Institutes of Health	4,938,571	4,395,822	198,037	74,572	13,334	15,310	37,039	41,978	162,479
Other agencies:									
National Aeronautics & Space Admin	519,823	45,645	3,712	199,568	163,271	19,413	67,655	254	20,305
National Science Foundation	2,006,181	332,584	5,033	450,862	363,532	324,429	357,006	79,232	93,503

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-68. Federal obligations for basic research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Psychology				Life sciences					
	Total	Bio-logical aspects	Social aspects	Psycho-logical sciences, n.e.c.	Total	Bio-logical	Environ-mental biology	Agri-cultural	Medical	Life sciences, n.e.c.
Total, all agencies	194,907	21,197	9,421	164,289	4,348,389	2,425,524	95,015	85,694	1,607,897	134,259
Departments:										
Department of Agriculture, total	0	0	0	0	161,069	48,631	22,823	85,059	4,556	0
Agricultural Research Service	0	0	0	0	15,090	1,422	1,202	12,140	326	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	141,620	44,691	20,015	72,684	4,230	0
Foreign Agricultural Service	0	0	0	0	235	0	0	235	0	0
Forest Service	0	0	0	0	4,124	2,518	1,606	0	0	0
Department of Defense, total	17,205	14,388	1,779	1,038	43,091	25,308	5,084	0	12,699	0
Department of the Army	1,414	0	1,404	10	6,174	1,994	0	0	4,180	0
Department of the Navy	11,713	10,685	0	1,028	15,615	6,164	4,931	0	4,520	0
Department of the Air Force	0	0	0	0	7,390	7,237	153	0	0	0
Defense Agencies, total	4,078	3,703	375	0	13,912	9,913	0	0	3,999	0
Washington Headquarters Services	4,078	3,703	375	0	13,912	9,913	0	0	3,999	0
Department of Energy	0	0	0	0	42,602	42,145	0	0	0	457
Dept of Health & Human Svcs, total	170,220	6,809	3,404	160,007	3,775,910	2,070,200	0	0	1,586,538	119,172
National Institutes of Health	170,220	6,809	3,404	160,007	3,775,910	2,070,200	0	0	1,586,538	119,172
Other agencies:										
National Aeronautics & Space Admin	3,244	0	0	3,244	45,645	25,521	755	635	4,104	14,630
National Science Foundation	4,238	0	4,238	0	280,072	213,719	66,353	0	0	0

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-69. Federal obligations for basic research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chemistry	Physics	Physical sciences, n.e.c.	Total	Atmospheric	Geological	Oceanography	Environmental sciences, n.e.c.
Total, all agencies	1,041,915	153,329	278,566	489,058	120,962	620,507	190,317	122,722	203,701	103,767
Departments:										
Department of Agriculture, total	11,897	0	11,844	53	0	1,753	1,657	96	0	0
Agricultural Research Service	1,400	0	1,347	53	0	108	105	3	0	0
Cooperative State Research, Education, & Extension Service	10,497	0	10,497	0	0	1,163	1,163	0	0	0
Forest Service	0	0	0	0	0	482	389	93	0	0
Department of Defense, total	86,499	153	30,289	50,307	5,750	70,900	14,491	6,175	41,539	8,695
Department of the Army	11,921	0	5,494	5,675	752	4,350	2,115	1,143	0	1,092
Department of the Navy	24,096	0	10,946	8,219	4,931	50,138	9,041	3,083	30,411	7,603
Department of the Air Force	17,593	153	1,834	15,539	67	216	216	0	0	0
Defense Agencies, total	32,889	0	12,015	20,874	0	16,196	3,119	1,949	11,128	0
Defense Adv Rsch Projects Agcy	155	0	155	0	0	0	0	0	0	0
Washington Headquarters Services	32,734	0	11,860	20,874	0	16,196	3,119	1,949	11,128	0
Department of Energy	298,288	0	42,014	255,537	737	66,947	19,373	20,857	4,137	22,580
Dept of Health & Human Svcs, total	64,005	0	61,812	2,193	0	11,504	0	0	0	11,504
National Institutes of Health	64,005	0	61,812	2,193	0	11,504	0	0	0	11,504
Other agencies:										
National Aeronautics & Space Admin	201,551	114,165	11,465	57,540	18,381	163,271	88,227	14,819	11,392	48,833
National Science Foundation	379,675	39,011	121,142	123,428	96,094	306,132	66,569	80,775	146,633	12,155

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-70. Federal obligations for basic research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	698,888	35,738	10,712	38,592	30,038	120,885	69,961	203,630	189,332
Departments:									
Department of Agriculture, total	5,355	0	0	88	18	17	9	0	5,223
Agricultural Research Service	160	0	0	88	18	17	9	0	28
Cooperative State Research, Education, & Extension Service	5,088	0	0	0	0	0	0	0	5,088
Forest Service	107	0	0	0	0	0	0	0	107
Department of Defense, total	251,653	8,785	3,505	5,581	2,547	74,192	46,328	66,104	44,611
Department of the Army	30,269	3,927	0	1,327	1,670	10,001	5,540	7,804	0
Department of the Navy	51,530	0	0	0	0	12,400	13,973	14,795	10,362
Department of the Air Force	21,020	0	0	0	0	7,433	88	3,008	10,491
Defense Agencies, total	148,834	4,858	3,505	4,254	877	44,358	26,727	40,497	23,758
Ballistic Missile Defense Org	3,939	1,843	0	0	0	2,096	0	0	0
Defense Adv Rsch Projects Agcy	25,923	0	0	0	0	988	0	6,665	18,270
Washington Headquarters Services	118,972	3,015	3,505	4,254	877	41,274	26,727	33,832	5,488
Department of Energy	41,769	0	0	3,065	0	0	9,949	24,673	4,082
Dept of Health & Human Svcs, total	31,971	0	0	0	0	0	0	0	31,971
National Institutes of Health	31,971	0	0	0	0	0	0	0	31,971
Other agencies:									
National Aeronautics & Space Admin	67,503	26,953	7,207	1,437	169	5,819	7,834	10,550	7,534
National Science Foundation	300,637	0	0	28,421	27,304	40,857	5,841	102,303	95,911

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-71. Federal obligations for basic research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field of science: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathematics	Computer sciences	Mathematics and computer sciences, n.e.c.	Total	Anthropology	Economics	Political science	Sociology	Social sciences, n.e.c.
Total, all agencies	400,983	112,530	268,660	19,793	117,212	10,214	23,884	4,829	6,339	71,946
Departments:										
Department of Agriculture, total	26	26	0	0	14,375	0	11,828	0	2,547	0
Agricultural Research Service	10	10	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	13,964	0	11,480	0	2,484	0
Forest Service	16	16	0	0	411	0	348	0	63	0
Department of Defense, total	86,903	18,470	52,936	15,497	0	0	0	0	0	0
Department of the Army	8,561	2,722	5,839	0	0	0	0	0	0	0
Department of the Navy	18,699	8,630	10,069	0	0	0	0	0	0	0
Department of the Air Force	12,835	133	0	12,702	0	0	0	0	0	0
Defense Agencies, total	46,808	6,985	37,028	2,795	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	14,453	0	14,453	0	0	0	0	0	0	0
Washington Headquarters Services	32,355	6,985	22,575	2,795	0	0	0	0	0	0
Department of Energy	9,681	7,297	2,384	0	0	0	0	0	0	0
Dept of Health & Human Svcs, total	13,056	6,267	6,789	0	35,924	0	0	0	0	35,924
National Institutes of Health	13,056	6,267	6,789	0	35,924	0	0	0	0	35,924
Other agencies:										
National Aeronautics & Space Admin	18,113	791	13,026	4,296	191	0	0	0	52	139
National Science Foundation	273,204	79,679	193,525	0	66,722	10,214	12,056	4,829	3,740	35,883

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-72. Federal obligations for applied research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1997, 1998, and 1999

[Dollars in thousands]

Page 1 of 1

Field of science and engineering	1997	Preliminary	
		1998	1999
Total, all fields	3,117,100	3,304,112	3,500,055
Life sciences, total	2,217,670	2,378,191	2,458,816
Biological (excluding environmental)	1,075,060	NA	NA
Environmental biology	51,563	NA	NA
Agricultural	87,388	NA	NA
Medical	929,439	NA	NA
Life sciences, n.e.c.	74,220	NA	NA
Psychology, total	88,492	93,703	99,308
Biological aspects	3,906	NA	NA
Social aspects	4,708	NA	NA
Psychological sciences, n.e.c.	79,878	NA	NA
Physical sciences, total	121,948	127,098	132,874
Astronomy	14,675	NA	NA
Chemistry	62,330	NA	NA
Physics	33,008	NA	NA
Physical sciences, n.e.c.	11,935	NA	NA
Environmental sciences, total	51,584	50,433	45,719
Atmospheric	15,470	NA	NA
Geological	1,472	NA	NA
Oceanography	11,704	NA	NA
Environmental sciences, n.e.c.	22,938	NA	NA
Mathematics & computer sciences, total	170,612	177,746	256,273
Mathematics	5,637	NA	NA
Computer sciences	160,697	NA	NA
Mathematics & computer sciences, n.e.c.	4,278	NA	NA
Engineering, total	289,125	277,734	313,079
Aeronautical	13,583	NA	NA
Astronautical	6,855	NA	NA
Chemical	24,087	NA	NA
Civil	15,062	NA	NA
Electrical	25,463	NA	NA
Mechanical	6,236	NA	NA
Metallurgy & materials	57,576	NA	NA
Engineering, n.e.c.	140,263	NA	NA
Social sciences, total	80,228	102,026	91,488
Anthropology	580	NA	NA
Economics	34,791	NA	NA
Political science	560	NA	NA
Sociology	8,182	NA	NA
Social sciences, n.e.c.	36,115	NA	NA
Other sciences, n.e.c.	97,441	97,181	102,498

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 89 percent of total Federal applied research obligations to universities and colleges in fiscal years 1997, 1998, and 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-73. Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1997

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,117,100	2,217,670	88,492	121,948	51,584	170,612	289,125	80,228	97,441
Departments:									
Department of Agriculture, total	242,182	173,896	0	14,463	2,912	177	12,795	37,939	0
Agricultural Marketing Service	181	181	0	0	0	0	0	0	0
Agricultural Research Service	12,022	10,183	0	1,434	94	13	298	0	0
Cooperative State Research, Education, & Extension Service	218,538	155,616	0	13,029	1,762	0	12,295	35,836	0
Economic Research Service	1,334	0	0	0	0	0	0	1,334	0
Foreign Agricultural Service	289	289	0	0	0	0	0	0	0
Forest Service	9,683	7,627	0	0	1,056	29	202	769	0
Nat'l Agricultural Statistics Svc	135	0	0	0	0	135	0	0	0
Department of Defense, total	387,425	52,849	3,401	17,731	26,742	153,343	130,743	38	2,578
Department of the Army	37,835	22,340	853	106	1,583	2,162	9,711	38	1,042
Department of the Navy	59,825	1,788	589	142	12,569	660	44,077	0	0
Department of the Air Force	19,739	0	669	4,057	3,338	2,163	9,512	0	0
Defense Agencies, total	270,026	28,721	1,290	13,426	9,252	148,358	67,443	0	1,536
Ballistic Missile Defense Org	3,281	0	0	0	0	0	3,281	0	0
Defense Adv Rsch Projects Agcy	219,190	10,247	0	3,224	102	144,955	59,897	0	765
Defense Special Weapons Agcy	8,632	0	0	0	7,660	0	340	0	632
Special Operations Command	464	0	0	0	0	0	325	0	139
Washington Headquarters Services	38,459	18,474	1,290	10,202	1,490	3,403	3,600	0	0
Department of Energy	92,851	29,968	0	24,870	2,903	0	28,915	0	6,195
Dept of Health & Human Svcs, total	2,188,682	1,941,373	83,312	31,186	5,605	8,555	15,577	34,057	69,017
Administration on Aging	90	0	0	0	0	0	0	90	0
Admin for Children & Families	10,191	0	0	0	0	0	0	10,191	0
Agcy for Hlth Care Policy & Rsch	39,782	32,387	376	0	0	2,194	0	3,648	1,177
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,177	11,177	0	0	0	0	0	0	0
Health Care Financing Admin	5,754	5,754	0	0	0	0	0	0	0
Health Resources & Services Admin	8,016	8,016	0	0	0	0	0	0	0
National Institutes of Health	2,066,746	1,839,738	82,936	31,186	5,605	6,361	15,577	17,503	67,840
Office of the Secretary, total	2,625	0	0	0	0	0	0	2,625	0
Office of the Asst Secretary, Planning & Evaluation	2,625	0	0	0	0	0	0	2,625	0
Other agencies:									
National Aeronautics & Space Admin	76,267	10,571	1,726	20,312	10,415	4,633	23,924	0	4,686
National Science Foundation	129,693	9,013	53	13,386	3,007	3,904	77,171	8,194	14,965

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-74. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

[Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,304,112	2,378,191	93,703	127,098	50,433	177,746	277,734	102,026	97,181
Departments:									
Department of Agriculture, total	263,117	176,247	0	15,018	2,976	249	12,911	55,716	0
Agricultural Research Service	14,016	11,872	0	1,672	110	15	347	0	0
Cooperative State Research, Education, & Extension Service	220,486	156,459	0	13,346	1,840	0	12,362	36,479	0
Economic Research Service	18,468	0	0	0	0	0	0	18,468	0
Foreign Agricultural Service	289	289	0	0	0	0	0	0	0
Forest Service	9,683	7,627	0	0	1,026	59	202	769	0
Nat'l Agricultural Statistics Svc	175	0	0	0	0	175	0	0	0
Department of Defense, total	394,887	74,086	2,693	14,396	24,078	159,775	118,356	55	1,448
Department of the Army	59,320	39,825	1,039	387	8,209	1,366	8,404	55	35
Department of the Navy	56,484	1,771	584	140	14,709	652	38,628	0	0
Department of the Air Force	11,387	124	159	1,998	0	510	8,596	0	0
Defense Agencies, total	267,696	32,366	911	11,871	1,160	157,247	62,728	0	1,413
Ballistic Missile Defense Org	3,030	0	0	0	0	0	3,030	0	0
Defense Adv Rsch Projects Agcy	235,648	18,887	0	5,190	110	154,847	56,614	0	0
Defense Special Weapons Agcy	1,512	0	0	0	0	0	99	0	1,413
Special Operations Command	445	0	0	0	0	0	445	0	0
Washington Headquarters Services	27,061	13,479	911	6,681	1,050	2,400	2,540	0	0
Department of Energy	97,544	30,119	0	30,500	6,547	0	28,814	0	1,564
Dept of Health & Human Svcs, total	2,342,668	2,075,843	88,943	33,492	5,989	9,187	16,635	38,065	74,514
Administration on Aging	200	0	0	0	0	0	0	200	0
Admin for Children & Families	12,545	0	0	0	0	0	0	12,545	0
Agcy for Hlth Care Policy & Rsch	38,517	31,199	0	0	0	2,311	0	3,467	1,540
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,200	11,200	0	0	0	0	0	0	0
Health Care Financing Admin	6,607	6,607	0	0	0	0	0	0	0
Health Resources & Services Admin	8,256	8,256	0	0	0	0	0	0	0
National Institutes of Health	2,218,042	1,974,280	88,943	33,492	5,989	6,876	16,635	18,853	72,974
Office of the Secretary, total	3,000	0	0	0	0	0	0	3,000	0
Office of the Asst Secretary, Planning & Evaluation	3,000	0	0	0	0	0	0	3,000	0
Other agencies:									
National Aeronautics & Space Admin	76,267	12,888	2,014	20,312	7,838	4,633	23,884	0	4,698
National Science Foundation	129,629	9,008	53	13,380	3,005	3,902	77,134	8,190	14,957

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 88 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-75. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Life sciences	Psychology	Physical sciences	Environmental sciences	Mathematics and computer sciences	Engineering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,500,055	2,458,816	99,308	132,874	45,719	256,273	313,079	91,488	102,498
Departments:									
Department of Agriculture, total	217,127	156,856	0	12,617	2,496	270	11,293	33,595	0
Agricultural Research Service	11,381	9,640	0	1,358	89	12	282	0	0
Cooperative State Research, Education, & Extension Service	193,355	139,300	0	11,259	1,381	0	10,809	30,606	0
Economic Research Service	2,220	0	0	0	0	0	0	2,220	0
Foreign Agricultural Service	289	289	0	0	0	0	0	0	0
Forest Service	9,683	7,627	0	0	1,026	59	202	769	0
Nat'l Agricultural Statistics Svc	199	0	0	0	0	199	0	0	0
Department of Defense, total	464,757	49,563	2,368	16,418	17,039	236,886	140,889	89	1,505
Department of the Army	25,004	8,562	1,683	2,346	1,880	3,353	7,059	89	32
Department of the Navy	58,215	1,825	602	144	15,159	672	39,813	0	0
Department of the Air Force	13,200	0	83	3,227	0	315	9,575	0	0
Defense Agencies, total	368,338	39,176	0	10,701	0	232,546	84,442	0	1,473
Ballistic Missile Defense Org	3,978	0	0	500	0	500	2,978	0	0
Defense Adv Rsch Projects Agcy	349,744	31,176	0	7,122	0	231,287	80,159	0	0
Defense Special Weapons Agcy	1,487	0	0	0	0	0	14	0	1,473
Special Operations Command	500	0	0	0	0	0	500	0	0
Washington Headquarters Services	12,629	8,000	0	3,079	0	759	791	0	0
Department of Energy	89,946	14,563	0	32,975	8,628	0	33,780	0	0
Dept of Health & Human Svcs, total	2,508,286	2,214,962	94,867	35,723	6,388	10,159	17,743	48,727	79,717
Administration on Aging	500	0	0	0	0	0	0	500	0
Admin for Children & Families	20,881	0	0	0	0	0	0	20,881	0
Agcy for Hlth Care Policy & Rsch	47,083	38,137	0	0	0	2,825	0	4,237	1,884
Centers for Disease Control & Prevention	44,301	44,301	0	0	0	0	0	0	0
Food & Drug Administration	11,900	11,900	0	0	0	0	0	0	0
Health Care Financing Admin	6,605	6,605	0	0	0	0	0	0	0
Health Resources & Services Admin	8,256	8,256	0	0	0	0	0	0	0
National Institutes of Health	2,365,760	2,105,763	94,867	35,723	6,388	7,334	17,743	20,109	77,833
Office of the Secretary, total	3,000	0	0	0	0	0	0	3,000	0
Office of the Asst Secretary, Planning & Evaluation	3,000	0	0	0	0	0	0	3,000	0
Other agencies:									
National Aeronautics & Space Admin	76,267	12,888	2,014	20,312	7,838	4,633	23,884	0	4,698
National Science Foundation	143,672	9,984	59	14,829	3,330	4,325	85,490	9,077	16,578

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 88 percent of total Federal applied research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-76. Federal obligations for applied research performed at universities and colleges
in psychology and life sciences, by selected agency and
detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Psychology				Life sciences					
	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	88,492	3,906	4,708	79,878	2,217,670	1,075,060	51,563	87,388	929,439	74,220
Departments:										
Department of Agriculture, total	0	0	0	0	173,896	40,765	43,397	85,999	3,735	0
Agricultural Marketing Service	0	0	0	0	181	0	0	181	0	0
Agricultural Research Service	0	0	0	0	10,183	364	1,834	7,846	139	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	155,616	35,712	38,625	77,683	3,596	0
Foreign Agricultural Service	0	0	0	0	289	0	0	289	0	0
Forest Service	0	0	0	0	7,627	4,689	2,938	0	0	0
Department of Defense, total	3,401	589	2,812	0	52,849	12,491	0	1,389	37,729	1,240
Department of the Army	853	0	853	0	22,340	225	0	0	21,728	387
Department of the Navy	589	589	0	0	1,788	0	0	0	935	853
Department of the Air Force	669	0	669	0	0	0	0	0	0	0
Defense Agencies, total	1,290	0	1,290	0	28,721	12,266	0	1,389	15,066	0
Defense Adv Rsch Projects Agcy	0	0	0	0	10,247	8,266	0	0	1,981	0
Washington Headquarters Services	1,290	0	1,290	0	18,474	4,000	0	1,389	13,085	0
Department of Energy	0	0	0	0	29,968	0	0	0	29,968	0
Dept of Health & Human Svcs, total	83,312	3,317	1,689	78,306	1,941,373	1,019,870	0	0	856,822	64,681
Agcy for Hlth Care Policy & Rsch	376	0	30	346	32,387	28	0	0	31,495	864
Centers for Disease Control & Prevention	0	0	0	0	44,301	0	0	0	44,301	0
Food & Drug Administration	0	0	0	0	11,177	11,177	0	0	0	0
Health Care Financing Admin	0	0	0	0	5,754	0	0	0	0	5,754
Health Resources & Services Admin	0	0	0	0	8,016	0	0	0	8,016	0
National Institutes of Health	82,936	3,317	1,659	77,960	1,839,738	1,008,665	0	0	773,010	58,063
Other agencies:										
National Aeronautics & Space Admin	1,726	0	154	1,572	10,571	952	135	0	1,185	8,299
National Science Foundation	53	0	53	0	9,013	982	8,031	0	0	0

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-77. Federal obligations for applied research performed at universities and colleges
in physical and environmental sciences, by selected agency and
detailed field of science: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Physical sciences					Environmental sciences				
	Total	Astronomy	Chemistry	Physics	Physical sciences, n.e.c.	Total	Atmospheric	Geological	Oceanography	Environmental sciences, n.e.c.
Total, all agencies	121,948	14,675	62,330	33,008	11,935	51,584	15,470	1,472	11,704	22,938
Departments:										
Department of Agriculture, total	14,463	0	14,392	71	0	2,912	2,566	346	0	0
Agricultural Research Service	1,434	0	1,363	71	0	94	89	5	0	0
Cooperative State Research, Education, & Extension Service	13,029	0	13,029	0	0	1,762	1,762	0	0	0
Forest Service	0	0	0	0	0	1,056	715	341	0	0
Department of Defense, total	17,731	0	9,188	4,616	3,927	26,742	5,195	105	9,201	12,241
Department of the Army	106	0	101	5	0	1,583	532	105	0	946
Department of the Navy	142	0	0	142	0	12,569	790	0	8,354	3,425
Department of the Air Force	4,057	0	275	3,782	0	3,338	3,128	0	0	210
Defense Agencies, total	13,426	0	8,812	687	3,927	9,252	745	0	847	7,660
Defense Adv Rsch Projects Agcy	3,224	0	0	687	2,537	102	0	0	102	0
Defense Special Weapons Agcy	0	0	0	0	0	7,660	0	0	0	7,660
Washington Headquarters Services	10,202	0	8,812	0	1,390	1,490	745	0	745	0
Department of Energy	24,870	0	3,509	21,361	0	2,903	0	0	0	2,903
Dept of Health & Human Svcs, total	31,186	0	30,117	1,069	0	5,605	0	0	0	5,605
National Institutes of Health	31,186	0	30,117	1,069	0	5,605	0	0	0	5,605
Other agencies:										
National Aeronautics & Space Admin	20,312	14,668	573	3,545	1,526	10,415	7,662	279	319	2,155
National Science Foundation	13,386	7	4,551	2,346	6,482	3,007	47	742	2,184	34

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-78. Federal obligations for applied research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1997

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	289,125	13,583	6,855	24,087	15,062	25,463	6,236	57,576	140,263
Departments:									
Department of Agriculture, total	12,795	0	0	166	42	8	15	0	12,564
Agricultural Research Service	298	0	0	166	42	8	15	0	67
Cooperative State Research, Education, & Extension Service	12,295	0	0	0	0	0	0	0	12,295
Forest Service	202	0	0	0	0	0	0	0	202
Department of Defense, total	130,743	6,232	2,676	581	3,055	20,364	3,365	52,694	41,776
Department of the Army	9,711	777	35	267	2,651	2,976	1,051	191	1,763
Department of the Navy	44,077	2,609	0	314	0	12,689	1,925	10,226	16,314
Department of the Air Force	9,512	2,724	2,641	0	404	2,428	149	1,039	127
Defense Agencies, total	67,443	122	0	0	0	2,271	240	41,238	23,572
Ballistic Missile Defense Org	3,281	0	0	0	0	730	0	2,551	0
Defense Adv Rsch Projects Agcy	59,897	122	0	0	0	1,441	0	38,687	19,647
Defense Special Weapons Agcy	340	0	0	0	0	100	240	0	0
Special Operations Command	325	0	0	0	0	0	0	0	325
Washington Headquarters Services	3,600	0	0	0	0	0	0	0	3,600
Department of Energy	28,915	0	0	13,194	3,152	2,035	18	211	10,305
Dept of Health & Human Svcs, total	15,577	0	0	0	0	0	0	0	15,577
National Institutes of Health	15,577	0	0	0	0	0	0	0	15,577
Other agencies:									
National Aeronautics & Space Admin	23,924	7,351	4,179	318	40	2,427	1,749	1,590	6,270
National Science Foundation	77,171	0	0	9,828	8,773	629	1,089	3,081	53,771

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-79. Federal obligations for applied research performed at universities and colleges
in mathematics and computer sciences and in social sciences,
by selected agency and detailed field of science:
fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Agency and subdivision	Mathematics and computer sciences				Social sciences					
	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	170,612	5,637	160,697	4,278	80,228	580	34,791	560	8,182	36,115
Departments:										
Department of Agriculture, total	177	177	0	0	37,939	0	31,327	0	6,612	0
Agricultural Research Service	13	13	0	0	0	0	0	0	0	0
Cooperative State Research, Education, & Extension Service	0	0	0	0	35,836	0	29,337	0	6,499	0
Economic Research Service	0	0	0	0	1,334	0	1,334	0	0	0
Forest Service	29	29	0	0	769	0	656	0	113	0
Nat'l Agricultural Statistics Svc	135	135	0	0	0	0	0	0	0	0
Department of Defense, total	153,343	1,793	147,563	3,987	38	0	25	0	13	0
Department of the Army	2,162	9	2,153	0	38	0	25	0	13	0
Department of the Navy	660	0	660	0	0	0	0	0	0	0
Department of the Air Force	2,163	536	1,073	554	0	0	0	0	0	0
Defense Agencies, total	148,358	1,248	143,677	3,433	0	0	0	0	0	0
Defense Adv Rsch Projects Agcy	144,955	1,248	143,677	30	0	0	0	0	0	0
Washington Headquarters Services	3,403	0	0	3,403	0	0	0	0	0	0
Dept of Health & Human Svcs, total	8,555	3,434	5,121	0	34,057	32	1,209	0	726	32,090
Administration on Aging	0	0	0	0	90	0	0	0	0	90
Admin for Children & Families	0	0	0	0	10,191	0	0	0	0	10,191
Agcy for Hlth Care Policy & Rsch	2,194	381	1,813	0	3,648	32	1,209	0	726	1,681
National Institutes of Health	6,361	3,053	3,308	0	17,503	0	0	0	0	17,503
Office of the Secretary, total	0	0	0	0	2,625	0	0	0	0	2,625
Office of the Asst Secretary, Planning & Evaluation	0	0	0	0	2,625	0	0	0	0	2,625
Other agencies:										
National Aeronautics & Space Admin	4,633	50	4,292	291	0	0	0	0	0	0
National Science Foundation	3,904	183	3,721	0	8,194	548	2,230	560	831	4,025

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1997.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-80. Federal obligations for research and development to foreign performers,
by region, country, and agency: fiscal year 1997**

[Dollars in thousands]

Page 1 of 1

Region and country	Total	USDA	DoD	DOE	HHS	AID ¹	NASA	NSF	Other ²
Total	257,474	3,482	120,928	2,455	45,380	21,150	47,261	9,975	6,843
Europe, total	102,021	2,069	48,688	1,790	11,878	0	24,857	7,578	5,161
Austria	3,852	0	1,054	625	0	0	0	2,173	0
Belgium	536	0	43	0	493	0	0	0	0
Denmark	403	0	19	0	284	0	0	100	0
Finland	1,815	0	0	0	1,815	0	0	0	0
France	5,215	2,048	297	0	294	0	539	1,565	472
Germany	3,415	10	2,915	0	0	0	10	0	480
Ireland	14,318	0	13,964	0	354	0	0	0	0
Italy	2,911	0	74	0	2,172	0	65	0	600
Netherlands	964	0	252	0	647	0	40	0	25
Norway	4,800	0	2	0	723	0	2,739	0	1,336
Poland	233	0	133	0	0	0	0	0	100
Portugal	5	0	5	0	0	0	0	0	0
Spain	13,310	0	15	0	49	0	13,246	0	0
Sweden	7,075	0	3,752	0	1,708	0	775	840	0
Switzerland	1,158	0	18	0	0	0	302	100	738
United Kingdom, total	33,237	0	24,263	1,165	3,278	0	1,321	2,800	410
England	29,589	0	23,582	950	3,278	0	1,321	175	283
Scotland	294	0	294	0	0	0	0	0	0
Bermuda	2,722	0	97	0	0	0	0	2,625	0
Other United Kingdom	632	0	290	215	0	0	0	0	127
Other Europe	8,774	11	1,882	0	61	0	5,820	0	1,000
Asia, total	2,509	45	475	0	1,903	0	43	0	43
Hong Kong	25	0	25	0	0	0	0	0	0
India	225	0	0	0	225	0	0	0	0
Japan	1,176	0	425	0	708	0	43	0	0
Other Asia	1,083	45	25	0	970	0	0	0	43
Near East, total	65,373	1	60,420	0	2,149	2,747	56	0	0
Egypt	2,536	0	0	0	0	2,536	0	0	0
Israel	62,626	1	60,420	0	2,149	0	56	0	0
Other Near East	211	0	0	0	0	211	0	0	0
Africa, total	1,572	0	831	0	741	0	0	0	0
Kenya	821	0	821	0	0	0	0	0	0
Union of South Africa	125	0	10	0	115	0	0	0	0
Other Africa	626	0	0	0	626	0	0	0	0
Latin America, total	6,515	1,359	193	43	2,318	0	205	2,397	0
Argentina	522	464	0	0	58	0	0	0	0
Brazil	2,989	0	193	0	503	0	0	2,293	0
Chile	100	0	0	0	0	0	100	0	0
Costa Rica	388	0	0	0	388	0	0	0	0
Ecuador	43	0	0	43	0	0	0	0	0
Mexico	168	0	0	0	68	0	0	100	0
Panama	899	895	0	0	0	0	0	4	0
Peru	105	0	0	0	0	0	105	0	0
Other Latin America	1,301	0	0	0	1,301	0	0	0	0
Australia	13,129	8	1,082	60	2,683	0	9,265	0	31
Canada	43,278	0	9,239	562	19,034	0	12,835	0	1,608
New Zealand	1,006	0	0	0	1,006	0	0	0	0
International Organizations	22,071	0	0	0	3,668	18,403	0	0	0

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

² Includes data for the Departments of Commerce, Interior, and Transportation; the Environmental Protection Agency, and the Nuclear Regulatory Commission.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: USDA = Department of Agriculture
DoD = Department of Defense
DOE = Department of Energy
HHS = Department of Health & Human Services
AID = Agency for International Development
NASA = National Aeronautics & Space Administration
NSF = National Science Foundation

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-81. Federal obligations for basic research to foreign performers,
by region, country, and agency: fiscal year 1997**

[Dollars in thousands]

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Region and country	Total	USDA	DoD	DOE	HHS	AID ¹	EPA	NASA	NSF
Total	49,940	1,816	8,328	1,233	25,148	15	126	5,137	8,137
Europe, total	20,873	1,095	4,199	893	6,117	0	101	2,628	5,840
Austria	1,114	0	54	625	0	0	0	0	435
Belgium	244	0	12	0	232	0	0	0	0
Denmark	233	0	0	0	133	0	0	0	100
Finland	962	0	0	0	962	0	0	0	0
France	2,927	1,085	229	0	0	0	4	44	1,565
Germany	280	10	257	0	0	0	8	5	0
Ireland	301	0	60	0	241	0	0	0	0
Italy	1,196	0	26	0	1,165	0	0	5	0
Netherlands	462	0	156	0	288	0	0	18	0
Norway	788	0	0	0	388	0	0	400	0
Poland	56	0	56	0	0	0	0	0	0
Portugal	5	0	5	0	0	0	0	0	0
Spain	70	0	15	0	48	0	0	7	0
Sweden	2,239	0	107	0	900	0	0	392	840
Switzerland	278	0	0	0	0	0	77	101	100
United Kingdom, total	8,141	0	3,090	268	1,733	0	9	241	2,800
England	5,261	0	2,850	253	1,733	0	9	241	175
Scotland	40	0	40	0	0	0	0	0	0
Bermuda	2,722	0	97	0	0	0	0	0	2,625
Other United Kingdom	118	0	103	15	0	0	0	0	0
Other Europe	1,577	0	132	0	27	0	3	1,415	0
Asia, total	1,292	0	440	0	826	0	4	22	0
Hong Kong	15	0	15	0	0	0	0	0	0
India	127	0	0	0	127	0	0	0	0
Japan	776	0	425	0	329	0	0	22	0
Other Asia	374	0	0	0	370	0	4	0	0
Near East, total	2,536	1	1,095	0	1,429	0	0	11	0
Israel	2,536	1	1,095	0	1,429	0	0	11	0
Africa, total	253	0	58	0	195	0	0	0	0
Kenya	48	0	48	0	0	0	0	0	0
Union of South Africa	64	0	10	0	54	0	0	0	0
Other Africa	141	0	0	0	141	0	0	0	0
Latin America, total	4,026	720	0	3	989	0	0	17	2,297
Argentina	302	246	0	0	56	0	0	0	0
Brazil	2,384	0	0	0	91	0	0	0	2,293
Chile	8	0	0	0	0	0	0	8	0
Costa Rica	182	0	0	0	182	0	0	0	0
Ecuador	3	0	0	3	0	0	0	0	0
Mexico	49	0	0	0	49	0	0	0	0
Panama	478	474	0	0	0	0	0	0	4
Peru	9	0	0	0	0	0	0	9	0
Other Latin America	611	0	0	0	611	0	0	0	0
Australia	2,540	0	928	60	1,512	0	0	40	0
Canada	15,727	0	1,608	277	11,402	0	21	2,419	0
New Zealand	545	0	0	0	545	0	0	0	0
International Organizations	2,148	0	0	0	2,133	15	0	0	0

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

KEY: USDA = Department of Agriculture
DoD = Department of Defense
DOE = Department of Energy
HHS = Department of Health & Human Services
AID = Agency for International Development
EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration
NSF = National Science Foundation

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-82. Federal obligations for research and development and for R&D plant for selected agencies, by State: fiscal year 1997

[Dollars in thousands]

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State	Research, development, and R&D plant	Research and development	R&D plant
Total	70,392,094	68,512,869	1,879,225
Alabama	2,257,073	2,213,683	43,390
Alaska	102,928	99,928	3,000
Arizona	733,929	732,065	1,864
Arkansas	109,842	95,709	14,133
California	14,138,268	13,731,238	407,030
Colorado	1,392,859	1,340,231	52,628
Connecticut	851,663	846,458	5,205
Delaware	51,381	48,964	2,417
District of Columbia	2,239,331	2,232,284	7,047
Florida	3,392,497	3,326,418	66,079
Georgia	3,925,064	3,919,868	5,196
Hawaii	153,768	150,722	3,046
Idaho	231,907	205,660	26,247
Illinois	1,274,462	1,140,163	134,299
Indiana	418,543	410,646	7,897
Iowa	237,033	228,180	8,853
Kansas	256,861	255,490	1,371
Kentucky	91,721	91,291	430
Louisiana	229,640	211,036	18,604
Maine	69,018	68,683	335
Maryland	7,628,511	7,328,937	299,574
Massachusetts	3,450,045	3,437,962	12,083
Michigan	740,197	735,221	4,976
Minnesota	612,037	609,395	2,642
Mississippi	328,622	289,791	38,831
Missouri	1,135,818	1,130,148	5,670
Montana	88,938	79,347	9,591
Nebraska	83,788	82,981	807
Nevada	296,042	295,042	1,000
New Hampshire	281,004	278,697	2,307
New Jersey	1,348,705	1,318,793	29,912
New Mexico	2,057,959	1,933,123	124,836
New York	2,623,387	2,471,213	152,174
North Carolina	928,368	900,947	27,421
North Dakota	56,747	53,015	3,732
Ohio	1,929,526	1,879,784	49,742
Oklahoma	167,015	160,356	6,659
Oregon	325,530	319,587	5,943
Pennsylvania	1,934,619	1,893,867	40,752
Rhode Island	408,487	403,844	4,643
South Carolina	176,873	166,607	10,266
South Dakota	42,321	41,955	366
Tennessee	604,971	566,242	38,729
Texas	3,702,926	3,640,162	62,764
Utah	322,644	319,826	2,818
Vermont	50,344	49,885	459
Virginia	4,906,395	4,849,753	56,642
Washington	1,290,932	1,226,154	64,778
West Virginia	195,904	193,061	2,843
Wisconsin	334,191	332,214	1,977
Wyoming	28,964	28,368	596
Outlying areas	97,569	93,259	4,310
Puerto Rico	59,313	58,943	370
Other areas	38,256	34,316	3,940
Offices abroad	54,927	54,616	311

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in fiscal year 1997.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-83. Federal obligations for research and development for selected agencies,
by State and performer: fiscal year 1997**

[Dollars in thousands]

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State (in order of total Federal research & development obligations)	Total	Intra- mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	68,512,869	16,148,245	31,352,526	1,109,712	12,403,284	3,686,615	2,768,144	808,562	235,781
California	13,731,238	1,454,133	7,816,020	0	1,743,099	2,034,903	473,915	202,992	6,176
Maryland	7,328,937	4,569,181	1,740,648	156,946	700,293	0	154,995	4,082	2,792
Virginia	4,849,753	1,654,696	2,718,179	0	226,968	62,434	36,922	143,214	7,340
Georgia	3,919,868	225,150	3,444,087	0	240,003	0	7,021	0	3,607
Texas	3,640,162	559,634	2,336,624	0	656,705	0	80,394	1,054	5,751
Massachusetts	3,437,962	361,118	1,308,755	0	792,569	156,418	652,158	162,735	4,209
Florida	3,326,418	649,376	2,363,556	0	296,270	0	11,009	0	6,207
New York	2,471,213	136,215	770,608	0	1,062,686	216,934	208,675	0	76,095
District of Columbia	2,232,284	1,732,539	167,567	0	155,363	0	175,954	390	471
Alabama	2,213,683	660,047	1,319,237	0	214,457	0	18,996	0	946
New Mexico	1,933,123	366,253	252,260	650,823	92,218	559,638	10,362	253	1,316
Pennsylvania	1,893,867	151,216	775,429	0	767,992	16,395	175,456	0	7,379
Ohio	1,879,784	681,170	776,770	0	327,760	0	91,782	0	2,302
Colorado	1,340,231	195,364	608,137	0	269,276	62,685	50,078	148,354	6,337
New Jersey	1,318,793	459,286	588,294	0	198,521	52,485	15,641	1,961	2,605
Washington	1,226,154	167,356	451,601	0	344,568	0	114,787	143,527	4,315
Illinois	1,140,163	77,224	114,294	0	465,934	422,522	54,309	0	5,880
Missouri	1,130,148	50,526	786,905	0	267,999	0	21,003	0	3,715
North Carolina	900,947	229,610	132,887	0	468,601	0	61,427	0	8,422
Connecticut	846,458	32,731	535,620	0	259,744	0	14,752	0	3,611
Michigan	735,221	107,749	166,289	0	425,543	0	31,743	0	3,897
Arizona	732,065	143,601	397,840	0	148,571	33,264	6,366	0	2,423
Minnesota	609,395	34,573	286,173	0	193,278	0	91,783	0	3,588
Tennessee	566,242	77,836	44,089	228,095	179,732	9,430	25,583	0	1,477
Indiana	410,646	68,272	138,563	0	197,947	0	3,588	0	2,276
Rhode Island	403,844	202,192	112,220	0	66,291	0	22,121	0	1,020
Wisconsin	332,214	42,606	28,994	0	247,731	0	8,721	0	4,162
Utah	319,826	117,231	68,306	0	130,820	0	2,691	0	778
Oregon	319,587	90,017	28,339	0	157,943	0	37,112	0	6,176
Nevada	295,042	46,025	224,446	0	21,714	0	2,188	0	669
Mississippi	289,791	165,297	72,030	0	44,569	0	6,659	0	1,236
New Hampshire	278,697	36,861	172,829	0	66,405	0	2,235	0	367
Kansas	255,490	15,622	171,241	0	63,749	0	1,328	0	3,550
Iowa	228,180	29,043	33,365	0	139,714	20,450	3,252	0	2,356
Louisiana	211,036	47,910	31,766	0	123,586	0	4,214	0	3,560
Idaho	205,660	24,092	110,729	56,664	13,609	0	315	0	251
West Virginia	193,061	86,663	39,734	0	23,560	30,813	10,942	0	1,349
South Carolina	166,607	34,019	13,252	17,184	94,954	0	3,799	0	3,399
Oklahoma	160,356	44,238	53,782	0	52,831	0	8,646	0	859
Hawaii	150,722	54,318	25,893	0	56,337	0	13,207	0	967
Alaska	99,928	38,381	14,893	0	29,731	0	2,421	0	14,502
Arkansas	95,709	49,469	5,782	0	37,509	0	2,030	0	919
Kentucky	91,291	7,289	7,436	0	71,617	0	1,086	0	3,863
Nebraska	82,981	23,741	5,761	0	47,959	0	5,026	0	494
Montana	79,347	33,199	10,103	0	32,117	0	3,561	0	367
Maine	68,683	5,685	19,962	0	13,866	0	26,791	0	2,379
North Dakota	53,015	26,401	312	0	23,655	0	449	0	2,198
Vermont	49,885	7,400	7,614	0	32,852	0	955	0	1,064
Delaware	48,964	10,207	8,777	0	25,369	0	4,395	0	216
South Dakota	41,955	19,307	6,480	0	14,075	0	1,500	0	593
Wyoming	28,368	8,720	675	0	16,169	0	2,469	0	335
Outlying areas	93,259	18,464	3,136	0	58,390	8,244	10	0	5,015
Puerto Rico	58,943	11,011	59	0	38,803	8,244	10	0	816
Other areas	34,316	7,453	3,077	0	19,587	0	0	0	4,199
Offices abroad	54,616	18,992	34,237	0	65	0	1,322	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-83a. Percentage distribution of Federal obligations for research and development to each performer for selected agencies, by State: fiscal year 1998

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State (in order of total Federal research & development obligations)	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	20.0	9.0	24.9	.0	14.1	55.2	17.1	25.1	2.6
Maryland	10.7	28.3	5.6	14.1	5.6	.0	5.6	.5	1.2
Virginia	7.1	10.2	8.7	.0	1.8	1.7	1.3	17.7	3.1
Georgia	5.7	1.4	11.0	.0	1.9	.0	.3	.0	1.5
Texas	5.3	3.5	7.5	.0	5.3	.0	2.9	.1	2.4
Massachusetts	5.0	2.2	4.2	.0	6.4	4.2	23.6	20.1	1.8
Florida	4.9	4.0	7.5	.0	2.4	.0	.4	.0	2.6
New York	3.6	.8	2.5	.0	8.6	5.9	7.5	.0	32.3
District of Columbia	3.3	10.7	.5	.0	1.3	.0	6.4	*	.2
Alabama	3.2	4.1	4.2	.0	1.7	.0	.7	.0	.4
New Mexico	2.8	2.3	.8	58.6	.7	15.2	.4	*	.6
Pennsylvania	2.8	.9	2.5	.0	6.2	.4	6.3	.0	3.1
Ohio	2.7	4.2	2.5	.0	2.6	.0	3.3	.0	1.0
Colorado	2.0	1.2	1.9	.0	2.2	1.7	1.8	18.3	2.7
New Jersey	1.9	2.8	1.9	.0	1.6	1.4	.6	.2	1.1
Washington	1.8	1.0	1.4	.0	2.8	.0	4.1	17.8	1.8
Illinois	1.7	.5	.4	.0	3.8	11.5	2.0	.0	2.5
Missouri	1.6	.3	2.5	.0	2.2	.0	.8	.0	1.6
North Carolina	1.3	1.4	.4	.0	3.8	.0	2.2	.0	3.6
Connecticut	1.2	.2	1.7	.0	2.1	.0	.5	.0	1.5
Michigan	1.1	.7	.5	.0	3.4	.0	1.1	.0	1.7
Arizona	1.1	.9	1.3	.0	1.2	.9	.2	.0	1.0
Minnesota .....	.9	.2	.9	.0	1.6	.0	3.3	.0	1.5
Tennessee .....	.8	.5	.1	20.6	1.4	.3	.9	.0	.6
Indiana .....	.6	.4	.4	.0	1.6	.0	.1	.0	1.0
Rhode Island .....	.6	1.3	.4	.0	.5	.0	.8	.0	.4
Wisconsin .....	.5	.3	.1	.0	2.0	.0	.3	.0	1.8
Utah .....	.5	.7	.2	.0	1.1	.0	.1	.0	.3
Oregon .....	.5	.6	.1	.0	1.3	.0	1.3	.0	2.6
Nevada .....	.4	.3	.7	.0	.2	.0	.1	.0	.3
Mississippi .....	.4	1.0	.2	.0	.4	.0	.2	.0	.5
New Hampshire .....	.4	.2	.6	.0	.5	.0	.1	.0	.2
Kansas .....	.4	.1	.5	.0	.5	.0	*	.0	1.5
Iowa .....	.3	.2	.1	.0	1.1	.6	.1	.0	1.0
Louisiana .....	.3	.3	.1	.0	1.0	.0	.2	.0	1.5
Idaho .....	.3	.1	.4	5.1	.1	.0	*	.0	.1
West Virginia .....	.3	.5	.1	.0	.2	.8	.4	.0	.6
South Carolina .....	.2	.2	*	1.5	.8	.0	.1	.0	1.4
Oklahoma .....	.2	.3	.2	.0	.4	.0	.3	.0	.4
Hawaii .....	.2	.3	.1	.0	.5	.0	.5	.0	.4
Alaska .....	.1	.2	*	.0	.2	.0	.1	.0	6.2
Arkansas .....	.1	.3	*	.0	.3	.0	.1	.0	.4
Kentucky .....	.1	*	*	.0	.6	.0	*	.0	1.6
Nebraska .....	.1	.1	*	.0	.4	.0	.2	.0	.2
Montana .....	.1	.2	*	.0	.3	.0	.1	.0	.2
Maine .....	.1	*	.1	.0	.1	.0	1.0	.0	1.0
North Dakota .....	.1	.2	*	.0	.2	.0	*	.0	.9
Vermont .....	.1	*	*	.0	.3	.0	*	.0	.5
Delaware .....	.1	.1	*	.0	.2	.0	.2	.0	.1
South Dakota .....	.1	.1	*	.0	.1	.0	.1	.0	.3
Wyoming	*	.1	*	.0	.1	.0	.1	.0	.1
Outlying areas .....	.1	.1	*	.0	.5	.2	*	.0	2.1
Puerto Rico .....	.1	.1	*	.0	.3	.2	*	.0	.3
Other areas .....	.1	*	*	.0	.2	.0	.0	.0	1.8
Offices abroad .....	.1	.1	.1	.0	*	.0	*	.0	.0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: * = Percentage less than .05%
FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-83b. Percentage distribution of Federal obligations for research and development to each State for selected agencies, by performer: fiscal year 1997

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State (in order of total Federal research & development obligations)	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other non-profit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Total	100.0	23.6	45.8	1.6	18.1	5.4	4.0	1.2	0.3
California	100.0	10.6	56.9	.0	12.7	14.8	3.5	1.5	*
Maryland	100.0	62.3	23.8	2.1	9.6	.0	2.1	.1	*
Virginia	100.0	34.1	56.0	.0	4.7	1.3	.8	3.0	.2
Georgia	100.0	5.7	87.9	.0	6.1	.0	.2	.0	.1
Texas	100.0	15.4	64.2	.0	18.0	.0	2.2	*	.2
Massachusetts	100.0	10.5	38.1	.0	23.1	4.5	19.0	4.7	.1
Florida	100.0	19.5	71.1	.0	8.9	.0	.3	.0	.2
New York	100.0	5.5	31.2	.0	43.0	8.8	8.4	.0	3.1
District of Columbia	100.0	77.6	7.5	.0	7.0	.0	7.9	*	*
Alabama	100.0	29.8	59.6	.0	9.7	.0	.9	.0	*
New Mexico	100.0	18.9	13.0	33.7	4.8	28.9	.5	*	.1
Pennsylvania	100.0	8.0	40.9	.0	40.6	.9	9.3	.0	.4
Ohio	100.0	36.2	41.3	.0	17.4	.0	4.9	.0	.1
Colorado	100.0	14.6	45.4	.0	20.1	4.7	3.7	11.1	.5
New Jersey	100.0	34.8	44.6	.0	15.1	4.0	1.2	.1	.2
Washington	100.0	13.6	36.8	.0	28.1	.0	9.4	11.7	.4
Illinois	100.0	6.8	10.0	.0	40.9	37.1	4.8	.0	.5
Missouri	100.0	4.5	69.6	.0	23.7	.0	1.9	.0	.3
North Carolina	100.0	25.5	14.7	.0	52.0	.0	6.8	.0	.9
Connecticut	100.0	3.9	63.3	.0	30.7	.0	1.7	.0	.4
Michigan	100.0	14.7	22.6	.0	57.9	.0	4.3	.0	.5
Arizona	100.0	19.6	54.3	.0	20.3	4.5	.9	.0	.3
Minnesota	100.0	5.7	47.0	.0	31.7	.0	15.1	.0	.6
Tennessee	100.0	13.7	7.8	40.3	31.7	1.7	4.5	.0	.3
Indiana	100.0	16.6	33.7	.0	48.2	.0	.9	.0	.6
Rhode Island	100.0	50.1	27.8	.0	16.4	.0	5.5	.0	.3
Wisconsin	100.0	12.8	8.7	.0	74.6	.0	2.6	.0	1.3
Utah	100.0	36.7	21.4	.0	40.9	.0	.8	.0	.2
Oregon	100.0	28.2	8.9	.0	49.4	.0	11.6	.0	1.9
Nevada	100.0	15.6	76.1	.0	7.4	.0	.7	.0	.2
Mississippi	100.0	57.0	24.9	.0	15.4	.0	2.3	.0	.4
New Hampshire	100.0	13.2	62.0	.0	23.8	.0	.8	.0	.1
Kansas	100.0	6.1	67.0	.0	25.0	.0	.5	.0	1.4
Iowa	100.0	12.7	14.6	.0	61.2	9.0	1.4	.0	1.0
Louisiana	100.0	22.7	15.1	.0	58.6	.0	2.0	.0	1.7
Idaho	100.0	11.7	53.8	27.6	6.6	.0	.2	.0	.1
West Virginia	100.0	44.9	20.6	.0	12.2	16.0	5.7	.0	.7
South Carolina	100.0	20.4	8.0	10.3	57.0	.0	2.3	.0	2.0
Oklahoma	100.0	27.6	33.5	.0	32.9	.0	5.4	.0	.5
Hawaii	100.0	36.0	17.2	.0	37.4	.0	8.8	.0	.6
Alaska	100.0	38.4	14.9	.0	29.8	.0	2.4	.0	14.5
Arkansas	100.0	51.7	6.0	.0	39.2	.0	2.1	.0	1.0
Kentucky	100.0	8.0	8.1	.0	78.4	.0	1.2	.0	4.2
Nebraska	100.0	28.6	6.9	.0	57.8	.0	6.1	.0	.6
Montana	100.0	41.8	12.7	.0	40.5	.0	4.5	.0	.5
Maine	100.0	8.3	29.1	.0	20.2	.0	39.0	.0	3.5
North Dakota	100.0	49.8	.6	.0	44.6	.0	.8	.0	4.1
Vermont	100.0	14.8	15.3	.0	65.9	.0	1.9	.0	2.1
Delaware	100.0	20.8	17.9	.0	51.8	.0	9.0	.0	.4
South Dakota	100.0	46.0	15.4	.0	33.5	.0	3.6	.0	1.4
Wyoming	100.0	30.7	2.4	.0	57.0	.0	8.7	.0	1.2
Outlying areas	100.0	19.8	3.4	.0	62.6	8.8	*	.0	5.4
Puerto Rico	100.0	18.7	.1	.0	65.8	14.0	*	.0	1.4
Other areas	100.0	21.7	9.0	.0	57.1	.0	.0	.0	12.2
Offices abroad	100.0	34.8	62.7	.0	.1	.0	2.4	.0	.0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: * = Percentage less than .05%
FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-84. Federal obligations for research and development, by State and selected agency: fiscal year 1997

[Dollars in thousands]

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State (in order of total Federal research & development obligations)	Total	Dept of Agriculture	Dept of Commerce	Dept of Defense ¹	Dept of Energy	Dept of Health & Human Services	Dept of the Interior	Dept of Transportation	EPA	NASA	National Science Foundation
Total	68,512,869	1,385,137	1,002,435	34,667,335	5,601,051	12,742,539	578,674	526,126	490,988	9,280,039	2,238,545
California	13,731,238	77,948	72,647	8,170,552	1,031,311	1,391,314	44,704	25,372	2,291	2,594,307	320,792
Maryland	7,328,937	124,859	337,400	2,633,709	50,605	3,004,910	17,555	33,540	11,600	1,057,414	57,345
Virginia	4,849,753	10,526	17,973	3,875,822	91,843	149,469	93,401	40,372	18,866	490,543	60,938
Georgia	3,919,868	47,635	1,667	3,472,381	10,494	294,638	11,590	11,771	14,031	22,093	33,568
Texas	3,640,162	61,263	13,007	1,217,616	24,896	495,579	14,283	9,831	11,742	1,713,888	78,057
Massachusetts	3,437,962	21,406	51,887	1,819,317	109,045	1,048,408	6,434	43,819	14,755	153,619	169,272
Florida	3,326,418	29,869	36,926	2,036,881	65,665	143,449	24,874	3,880	10,644	908,821	65,409
New York	2,471,213	33,864	12,554	621,407	516,968	1,015,997	9,181	7,939	8,990	50,219	194,094
District of Columbia	2,232,284	156,292	18,076	1,022,235	263,098	195,212	2,757	131,979	62,118	305,791	74,726
Alabama	2,213,683	16,323	1,478	1,295,372	34,848	149,266	5,126	1,581	1,733	697,986	9,970
New Mexico	1,933,123	7,165	548	675,057	1,117,476	49,410	6,329	12,345	671	51,401	12,721
Pennsylvania	1,893,867	40,848	27,121	614,966	351,742	684,859	8,710	6,213	6,343	49,464	103,601
Ohio	1,879,784	15,303	10,267	943,438	17,781	326,484	3,635	12,712	61,580	448,477	40,107
Colorado	1,340,231	31,959	82,383	574,734	165,470	177,009	66,003	10,835	10,148	112,274	109,416
New Jersey	1,318,793	5,682	39,083	864,900	79,324	108,475	7,205	66,402	3,794	94,717	49,211
Washington	1,226,154	35,561	60,774	427,471	180,884	364,610	12,010	4,258	3,839	89,007	47,740
Illinois	1,140,163	41,089	14,973	145,256	474,034	314,840	3,735	11,128	2,409	17,938	114,761
Missouri	1,130,148	22,686	282	812,953	3,165	236,635	11,765	3,258	283	16,009	23,112
North Carolina	900,947	30,130	20,300	150,960	13,267	481,292	6,761	8,257	125,216	15,173	49,591
Connecticut	846,458	5,807	15,925	448,824	64,611	227,530	2,184	14,799	1,405	42,485	22,888
Michigan	735,221	20,749	29,343	251,334	12,570	291,306	7,519	4,657	15,754	19,031	82,958
Arizona	732,065	21,312	700	509,668	3,546	71,280	6,611	913	2,150	47,927	67,958
Minnesota	609,395	21,735	10,470	302,187	6,334	203,687	6,443	1,197	15,386	6,441	35,515
Tennessee	566,242	7,961	1,198	93,423	248,998	160,546	4,403	2,617	1,203	28,629	17,264
Indiana	410,646	16,956	869	201,363	28,212	100,809	5,041	1,075	1,942	7,872	46,507
Rhode Island	403,844	1,948	4,954	307,758	2,855	49,652	1,732	796	10,753	3,573	19,823
Wisconsin	332,214	35,637	4,040	21,921	17,248	170,359	17,156	3,787	2,349	19,377	40,340
Utah	319,826	13,064	1,747	185,481	6,027	77,998	4,086	1,531	748	10,177	18,967
Oregon	319,587	37,697	20,875	22,991	46,084	121,710	9,802	1,622	21,840	6,565	30,401
Nevada	295,042	2,214	161	32,700	208,845	9,364	10,716	6,583	15,141	1,517	7,801
Mississippi	289,791	54,282	9,415	113,384	1,060	14,330	3,384	3,118	893	84,164	5,761
New Hampshire	278,697	4,399	3,094	203,657	921	39,531	1,615	574	1,151	11,927	11,828
Kansas	255,490	13,078	564	173,818	4,401	37,570	4,961	542	2,849	3,774	13,933
Iowa	228,180	41,080	1,225	37,325	25,510	92,903	3,076	4,925	2,162	6,717	13,257
Louisiana	211,036	32,823	8,011	30,768	9,989	64,520	15,148	803	6,651	27,174	15,149
Idaho	205,660	17,166	1,538	10,978	159,735	1,538	8,934	2,416	288	570	2,497
West Virginia	193,061	20,111	1,496	15,575	69,300	31,646	6,747	1,491	0	11,334	35,361
South Carolina	166,607	14,399	14,342	48,242	29,922	39,756	3,432	924	1,239	2,829	11,522
Oklahoma	160,356	17,271	8,075	38,219	28,522	32,408	3,763	9,808	9,088	2,049	11,153
Hawaii	150,722	21,250	12,839	60,710	3,005	20,938	5,988	383	140	6,932	18,537
Alaska	99,928	6,989	20,280	28,373	0	2,600	17,656	515	80	14,096	9,339
Arkansas	95,709	23,559	300	9,313	22	52,901	4,060	620	732	350	3,852
Kentucky	91,291	8,474	184	9,530	5,698	51,828	2,895	866	974	1,552	9,290
Nebraska	82,981	26,528	119	7,996	861	28,627	5,311	587	0	2,355	10,597
Montana	79,347	18,832	1,664	13,485	1,565	22,555	6,707	503	330	4,249	9,457
Maine	68,683	4,529	5,335	19,539	2,035	26,601	1,806	151	683	1,091	6,913
North Dakota	53,015	25,018	358	2,234	3,746	3,540	6,485	5,843	2,310	1,000	2,481
Vermont	49,885	5,584	223	10,338	250	25,344	1,920	1,154	371	790	3,911
Delaware	48,964	3,742	1,789	15,074	1,751	7,439	922	4,580	636	3,088	9,943
South Dakota	41,955	6,967	334	3,015	79	2,855	12,347	367	0	8,905	7,086
Wyoming	28,368	7,243	396	1,889	4,649	1,162	3,913	359	602	616	7,539
Outlying areas	93,259	13,105	970	10,387	784	25,850	25,853	197	85	1,742	14,286
Puerto Rico	58,943	9,307	363	2,023	784	25,181	5,178	197	85	1,742	14,083
Other areas	34,316	3,798	607	8,364	0	669	20,675	0	0	0	203
Offices abroad	54,616	3,220	256	50,809	0	0	0	331	0	0	0

¹ Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-84a. Percentage distribution of Federal obligations for research and development of each selected agency, by State: fiscal year 1997

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State (in order of total Federal research & development obligations)	Total	Dept of Agriculture	Dept of Commerce	Dept of Defense ¹	Dept of Energy	Dept of Health & Human Services	Dept of the Interior	Dept of Transportation	EPA	NASA	National Science Foundation
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	20.0	5.6	7.2	23.6	18.4	10.9	7.7	4.8	.5	28.0	14.3
Maryland	10.7	9.0	33.7	7.6	.9	23.6	3.0	6.4	2.4	11.4	2.6
Virginia	7.1	.8	1.8	11.2	1.6	1.2	16.1	7.7	3.8	5.3	2.7
Georgia	5.7	3.4	.2	10.0	.2	2.3	2.0	2.2	2.9	.2	1.5
Texas	5.3	4.4	1.3	3.5	.4	3.9	2.5	1.9	2.4	18.5	3.5
Massachusetts	5.0	1.5	5.2	5.2	1.9	8.2	1.1	8.3	3.0	1.7	7.6
Florida	4.9	2.2	3.7	5.9	1.2	1.1	4.3	.7	2.2	9.8	2.9
New York	3.6	2.4	1.3	1.8	9.2	8.0	1.6	1.5	1.8	.5	8.7
District of Columbia	3.3	11.3	1.8	2.9	4.7	1.5	.5	25.1	12.7	3.3	3.3
Alabama	3.2	1.2	.1	3.7	.6	1.2	.9	.3	.4	7.5	.4
New Mexico	2.8	.5	.1	1.9	20.0	.4	1.1	2.3	.1	.6	.6
Pennsylvania	2.8	2.9	2.7	1.8	6.3	5.4	1.5	1.2	1.3	.5	4.6
Ohio	2.7	1.1	1.0	2.7	.3	2.6	.6	2.4	12.5	4.8	1.8
Colorado	2.0	2.3	8.2	1.7	3.0	1.4	11.4	2.1	2.1	1.2	4.9
New Jersey	1.9	.4	3.9	2.5	1.4	.9	1.2	12.6	.8	1.0	2.2
Washington	1.8	2.6	6.1	1.2	3.2	2.9	2.1	.8	.8	1.0	2.1
Illinois	1.7	3.0	1.5	.4	8.5	2.5	.6	2.1	.5	.2	5.1
Missouri	1.6	1.6	*	2.3	.1	1.9	2.0	.6	.1	.2	1.0
North Carolina	1.3	2.2	2.0	.4	.2	3.8	1.2	1.6	25.5	.2	2.2
Connecticut	1.2	.4	1.6	1.3	1.2	1.8	.4	2.8	.3	.5	1.0
Michigan	1.1	1.5	2.9	.7	.2	2.3	1.3	.9	3.2	.2	3.7
Arizona	1.1	1.5	.1	1.5	.1	.6	1.1	.2	.4	.5	3.0
Minnesota .....	.9	1.6	1.0	.9	.1	1.6	1.1	.2	3.1	.1	1.6
Tennessee .....	.8	.6	.1	.3	4.4	1.3	.8	.5	.2	.3	.8
Indiana .....	.6	1.2	.1	.6	.5	.8	.9	.2	.4	.1	2.1
Rhode Island .....	.6	.1	.5	.9	.1	.4	.3	.2	2.2	*	.9
Wisconsin .....	.5	2.6	.4	.1	.3	1.3	3.0	.7	.5	.2	1.8
Utah .....	.5	.9	.2	.5	.1	.6	.7	.3	.2	.1	.8
Oregon .....	.5	2.7	2.1	.1	.8	1.0	1.7	.3	4.4	.1	1.4
Nevada .....	.4	.2	*	.1	3.7	.1	1.9	1.3	3.1	*	.3
Mississippi .....	.4	3.9	.9	.3	*	.1	.6	.6	.2	.9	.3
New Hampshire .....	.4	.3	.3	.6	*	.3	.3	.1	.2	.1	.5
Kansas .....	.4	.9	.1	.5	.1	.3	.9	.1	.6	*	.6
Iowa .....	.3	3.0	.1	.1	.5	.7	.5	.9	.4	.1	.6
Louisiana .....	.3	2.4	.8	.1	.2	.5	2.6	.2	1.4	.3	.7
Idaho .....	.3	1.2	.2	*	2.9	*	1.5	.5	.1	*	.1
West Virginia .....	.3	1.5	.1	*	1.2	.2	1.2	.3	.0	.1	1.6
South Carolina .....	.2	1.0	1.4	.1	.5	.3	.6	.2	.3	*	.5
Oklahoma .....	.2	1.2	.8	.1	.5	.3	.7	1.9	1.9	*	.5
Hawaii .....	.2	1.5	1.3	.2	.1	.2	1.0	.1	*	.1	.8
Alaska .....	.1	.5	2.0	.1	.0	*	3.1	.1	*	.2	.4
Arkansas .....	.1	1.7	*	*	*	.4	.7	.1	.1	*	.2
Kentucky .....	.1	.6	*	*	.1	.4	.5	.2	.2	*	.4
Nebraska .....	.1	1.9	*	*	*	.2	.9	.1	.0	*	.5
Montana .....	.1	1.4	.2	*	*	.2	1.2	.1	.1	*	.4
Maine .....	.1	.3	.5	.1	*	.2	.3	*	.1	*	.3
North Dakota .....	.1	1.8	*	*	.1	*	1.1	1.1	.5	*	.1
Vermont .....	.1	.4	*	*	*	.2	.3	.2	.1	*	.2
Delaware .....	.1	.3	.2	*	*	.1	.2	.9	.1	*	.4
South Dakota .....	.1	.5	*	*	*	*	2.1	.1	.0	.1	.3
Wyoming	*	.5	*	*	.1	*	.7	.1	.1	*	.3
Outlying areas .....	.1	.9	.1	*	*	.2	4.5	*	*	*	.6
Puerto Rico .....	.1	.7	*	*	*	.2	.9	*	*	*	.6
Other areas .....	.1	.3	.1	*	.0	*	3.6	.0	.0	.0	*
Offices abroad .....	.1	.2	*	.1	.0	.0	.0	.1	.0	.0	.0

¹ Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: * = Percentage less than .05%
EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-84b. Percentage distribution of Federal obligations for research and development of each State, by selected agency: fiscal year 1997

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State (in order of total Federal research & development obligations)	Total	Dept of Agriculture	Dept of Commerce	Dept of Defense ¹	Dept of Energy	Dept of Health & Human Services	Dept of the Interior	Dept of Transportation	EPA	NASA	National Science Foundation
Total	100.0	2.0	1.5	50.6	8.2	18.6	0.8	0.8	0.7	13.5	3.3
California	100.0	.6	.5	59.5	7.5	10.1	.3	.2	*	18.9	2.3
Maryland	100.0	1.7	4.6	35.9	.7	41.0	.2	.5	.2	14.4	.8
Virginia	100.0	.2	.4	79.9	1.9	3.1	1.9	.8	.4	10.1	1.3
Georgia	100.0	1.2	*	88.6	.3	7.5	.3	.3	.4	.6	.9
Texas	100.0	1.7	.4	33.4	.7	13.6	.4	.3	.3	47.1	2.1
Massachusetts	100.0	.6	1.5	52.9	3.2	30.5	.2	1.3	.4	4.5	4.9
Florida	100.0	.9	1.1	61.2	2.0	4.3	.7	.1	.3	27.3	2.0
New York	100.0	1.4	.5	25.1	20.9	41.1	.4	.3	.4	2.0	7.9
District of Columbia	100.0	7.0	.8	45.8	11.8	8.7	.1	5.9	2.8	13.7	3.3
Alabama	100.0	.7	.1	58.5	1.6	6.7	.2	.1	.1	31.5	.5
New Mexico	100.0	.4	*	34.9	57.8	2.6	.3	.6	*	2.7	.7
Pennsylvania	100.0	2.2	1.4	32.5	18.6	36.2	.5	.3	.3	2.6	5.5
Ohio	100.0	.8	.5	50.2	.9	17.4	.2	.7	3.3	23.9	2.1
Colorado	100.0	2.4	6.1	42.9	12.3	13.2	4.9	.8	.8	8.4	8.2
New Jersey	100.0	.4	3.0	65.6	6.0	8.2	.5	5.0	.3	7.2	3.7
Washington	100.0	2.9	5.0	34.9	14.8	29.7	1.0	.3	.3	7.3	3.9
Illinois	100.0	3.6	1.3	12.7	41.6	27.6	.3	1.0	.2	1.6	10.1
Missouri	100.0	2.0	*	71.9	.3	20.9	1.0	.3	*	1.4	2.0
North Carolina	100.0	3.3	2.3	16.8	1.5	53.4	.8	.9	13.9	1.7	5.5
Connecticut	100.0	.7	1.9	53.0	7.6	26.9	.3	1.7	.2	5.0	2.7
Michigan	100.0	2.8	4.0	34.2	1.7	39.6	1.0	.6	2.1	2.6	11.3
Arizona	100.0	2.9	.1	69.6	.5	9.7	.9	.1	.3	6.5	9.3
Minnesota	100.0	3.6	1.7	49.6	1.0	33.4	1.1	.2	2.5	1.1	5.8
Tennessee	100.0	1.4	.2	16.5	44.0	28.4	.8	.5	.2	5.1	3.0
Indiana	100.0	4.1	.2	49.0	6.9	24.5	1.2	.3	.5	1.9	11.3
Rhode Island	100.0	.5	1.2	76.2	.7	12.3	.4	.2	2.7	.9	4.9
Wisconsin	100.0	10.7	1.2	6.6	5.2	51.3	5.2	1.1	.7	5.8	12.1
Utah	100.0	4.1	.5	58.0	1.9	24.4	1.3	.5	.2	3.2	5.9
Oregon	100.0	11.8	6.5	7.2	14.4	38.1	3.1	.5	6.8	2.1	9.5
Nevada	100.0	.8	.1	11.1	70.8	3.2	3.6	2.2	5.1	.5	2.6
Mississippi	100.0	18.7	3.2	39.1	.4	4.9	1.2	1.1	.3	29.0	2.0
New Hampshire	100.0	1.6	1.1	73.1	.3	14.2	.6	.2	.4	4.3	4.2
Kansas	100.0	5.1	.2	68.0	1.7	14.7	1.9	.2	1.1	1.5	5.5
Iowa	100.0	18.0	.5	16.4	11.2	40.7	1.3	2.2	.9	2.9	5.8
Louisiana	100.0	15.6	3.8	14.6	4.7	30.6	7.2	.4	3.2	12.9	7.2
Idaho	100.0	8.3	.7	5.3	77.7	.7	4.3	1.2	.1	.3	1.2
West Virginia	100.0	10.4	.8	8.1	35.9	16.4	3.5	.8	.0	5.9	18.3
South Carolina	100.0	8.6	8.6	29.0	18.0	23.9	2.1	.6	.7	1.7	6.9
Oklahoma	100.0	10.8	5.0	23.8	17.8	20.2	2.3	6.1	5.7	1.3	7.0
Hawaii	100.0	14.1	8.5	40.3	2.0	13.9	4.0	.3	.1	4.6	12.3
Alaska	100.0	7.0	20.3	28.4	.0	2.6	17.7	.5	.1	14.1	9.3
Arkansas	100.0	24.6	.3	9.7	*	55.3	4.2	.6	.8	.4	4.0
Kentucky	100.0	9.3	.2	10.4	6.2	56.8	3.2	.9	1.1	1.7	10.2
Nebraska	100.0	32.0	.1	9.6	1.0	34.5	6.4	.7	.0	2.8	12.8
Montana	100.0	23.7	2.1	17.0	2.0	28.4	8.5	.6	.4	5.4	11.9
Maine	100.0	6.6	7.8	28.4	3.0	38.7	2.6	.2	1.0	1.6	10.1
North Dakota	100.0	47.2	.7	4.2	7.1	6.7	12.2	11.0	4.4	1.9	4.7
Vermont	100.0	11.2	.4	20.7	.5	50.8	3.8	2.3	.7	1.6	7.8
Delaware	100.0	7.6	3.7	30.8	3.6	15.2	1.9	9.4	1.3	6.3	20.3
South Dakota	100.0	16.6	.8	7.2	.2	6.8	29.4	.9	.0	21.2	16.9
Wyoming	100.0	25.5	1.4	6.7	16.4	4.1	13.8	1.3	2.1	2.2	26.6
Outlying areas	100.0	14.1	1.0	11.1	.8	27.7	27.7	.2	.1	1.9	15.3
Puerto Rico	100.0	15.8	.6	3.4	1.3	42.7	8.8	.3	.1	3.0	23.9
Other areas	100.0	11.1	1.8	24.4	.0	1.9	60.2	.0	.0	.0	.6
Offices abroad	100.0	5.9	.5	93.0	.0	.0	.0	.6	.0	.0	.0

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NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: * = Percentage less than .05%
EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Alabama, total	2,213,683	660,047	1,319,237	0	214,457	0	18,996	0	946
Department of Agriculture	16,323	4,749	0	0	11,509	0	0	0	65
Department of Commerce	1,478	621	80	0	495	0	282	0	0
Department of Defense, research ²	81,532	45,179	25,550	0	9,364	0	1,439	0	0
Department of Defense, total development ^{3 4}	1,213,840	305,301	904,004	0	4,393	0	142	0	0
Department of Energy	34,848	75	21,767	0	12,756	0	250	0	0
Department of Health & Human Svcs	149,266	139	1,777	0	132,796	0	14,533	0	21
Department of the Interior	5,126	4,432	527	0	167	0	0	0	0
Department of Transportation	1,581	0	808	0	0	0	0	0	773
Environmental Protection Agency	1,733	0	0	0	1,545	0	188	0	0
National Aeronautics and Space Admin ..	697,986	299,551	364,173	0	32,327	0	1,848	0	87
National Science Foundation	9,970	0	551	0	9,105	0	314	0	0
Alaska, total	99,928	38,381	14,893	0	29,731	0	2,421	0	14,502
Department of Agriculture	6,989	5,053	0	0	1,891	0	45	0	0
Department of Commerce	20,280	16,970	0	0	2,860	0	450	0	0
Department of Defense, research ²	895	648	27	0	220	0	0	0	0
Department of Defense, total development ^{3 4}	27,478	1,609	11,946	0	237	0	0	0	13,686
Department of Health & Human Svcs	2,600	329	15	0	1,949	0	0	0	307
Department of the Interior	17,656	13,639	2,707	0	1,271	0	39	0	0
Department of Transportation	515	0	6	0	0	0	0	0	509
Environmental Protection Agency	80	0	0	0	80	0	0	0	0
National Aeronautics and Space Admin ..	14,096	133	0	0	13,182	0	781	0	0
National Science Foundation	9,339	0	192	0	8,041	0	1,106	0	0
Arizona, total	732,065	143,601	397,840	0	148,571	33,264	6,366	0	2,423
Department of Agriculture	21,312	13,830	6	0	7,408	0	56	0	12
Department of Commerce	700	43	0	0	530	0	0	0	127
Department of Defense, research ²	45,512	6,356	23,176	0	15,964	0	16	0	0
Department of Defense, total development ^{3 4}	464,156	112,880	348,401	0	2,864	0	0	0	11
Department of Energy	3,546	0	0	0	3,546	0	0	0	0
Department of Health & Human Svcs	71,280	44	2,344	0	63,339	0	4,262	0	1,291
Department of the Interior	6,611	6,332	28	0	251	0	0	0	0
Department of Transportation	913	0	161	0	216	0	0	0	536
Environmental Protection Agency	2,150	0	597	0	1,553	0	0	0	0
National Aeronautics and Space Admin ..	47,927	4,116	21,255	0	20,349	0	1,761	0	446
National Science Foundation	67,958	0	1,872	0	32,551	33,264	271	0	0
Arkansas, total	95,709	49,469	5,782	0	37,509	0	2,030	0	919
Department of Agriculture	23,559	11,213	0	0	12,317	0	5	0	24
Department of Commerce	300	0	0	0	0	0	0	0	300
Department of Defense, research ²	2,066	0	100	0	1,966	0	0	0	0
Department of Defense, total development ^{3 4}	7,247	2,517	4,655	0	75	0	0	0	0
Department of Energy	22	0	22	0	0	0	0	0	0
Department of Health & Human Svcs	52,901	31,797	898	0	18,181	0	2,025	0	0
Department of the Interior	4,060	3,942	3	0	115	0	0	0	0
Department of Transportation	620	0	25	0	0	0	0	0	595
Environmental Protection Agency	732	0	0	0	732	0	0	0	0
National Aeronautics and Space Admin ..	350	0	0	0	350	0	0	0	0
National Science Foundation	3,852	0	79	0	3,773	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
California, total	13,731,238	1,454,133	7,816,020	0	1,743,099	2,034,903	473,915	202,992	6,176
Department of Agriculture	77,948	54,422	429	0	22,485	0	502	0	110
Department of Commerce	72,647	17,104	46,744	0	7,309	0	1,490	0	0
Department of Defense, research ²	751,929	199,969	314,663	0	190,845	23,741	21,530	1,032	149
Department of Defense, total development ^{3 4}	7,418,623	865,319	6,293,623	0	31,404	29,759	8,503	190,015	0
Department of Energy	1,031,311	8,199	63,580	0	85,156	858,618	15,758	0	0
Department of Health & Human Svcs	1,391,314	3,928	74,465	0	956,680	20,138	323,753	10,618	1,732
Department of the Interior	44,704	41,226	571	0	2,518	0	243	0	146
Department of Transportation	25,372	5,237	11,723	0	3,374	0	1,467	0	3,571
Environmental Protection Agency	2,291	0	0	0	1,900	0	391	0	0
National Aeronautics and Space Admin ..	2,594,307	258,526	985,825	0	165,692	1,102,249	80,593	1,177	245
National Science Foundation	320,792	203	24,397	0	275,736	398	19,685	150	223
Colorado, total	1,340,231	195,364	608,137	0	269,276	62,685	50,078	148,354	6,337
Department of Agriculture	31,959	22,257	65	0	8,291	0	75	0	1,271
Department of Commerce	82,383	73,364	1,883	0	6,583	53	0	0	500
Department of Defense, research ²	37,856	2,651	19,280	0	14,947	8	970	0	0
Department of Defense, total development ^{3 4}	536,878	24,712	509,402	0	487	2,277	0	0	0
Department of Energy	165,470	2,465	3,812	0	8,670	0	2,129	148,354	40
Department of Health & Human Svcs	177,009	831	9,108	0	130,809	0	32,769	0	3,492
Department of the Interior	66,003	62,880	44	0	2,821	0	120	0	138
Department of Transportation	10,835	116	6,659	0	68	0	3,239	0	753
Environmental Protection Agency	10,148	0	439	0	5,318	0	4,391	0	0
National Aeronautics and Space Admin ..	112,274	5,470	52,804	0	45,171	3,200	5,629	0	0
National Science Foundation	109,416	618	4,641	0	46,111	57,147	756	0	143
Connecticut, total	846,458	32,731	535,620	0	259,744	0	14,752	0	3,611
Department of Agriculture	5,807	2,604	0	0	3,203	0	0	0	0
Department of Commerce	15,925	273	13,534	0	2,118	0	0	0	0
Department of Defense, research ²	41,958	12,571	18,798	0	10,589	0	0	0	0
Department of Defense, total development ^{3 4}	406,866	5,077	395,974	0	2,137	0	3,678	0	0
Department of Energy	64,611	0	54,513	0	10,098	0	0	0	0
Department of Health & Human Svcs	227,530	4	6,940	0	208,063	0	9,636	0	2,887
Department of the Interior	2,184	2,037	61	0	86	0	0	0	0
Department of Transportation	14,799	10,165	3,895	0	106	0	0	0	633
Environmental Protection Agency	1,405	0	217	0	1,143	0	45	0	0
National Aeronautics and Space Admin ..	42,485	0	39,641	0	1,718	0	1,126	0	0
National Science Foundation	22,888	0	2,047	0	20,483	0	267	0	91
Delaware, total	48,964	10,207	8,777	0	25,369	0	4,395	0	216
Department of Agriculture	3,742	971	170	0	2,599	0	0	0	2
Department of Commerce	1,789	620	199	0	970	0	0	0	0
Department of Defense, research ²	8,156	674	912	0	6,098	0	472	0	0
Department of Defense, total development ^{3 4}	6,918	4,069	2,829	0	20	0	0	0	0
Department of Energy	1,751	0	0	0	1,324	0	427	0	0
Department of Health & Human Svcs	7,439	0	1,558	0	5,185	0	696	0	0
Department of the Interior	922	780	0	0	142	0	0	0	0
Department of Transportation	4,580	3,093	1,193	0	80	0	0	0	214
Environmental Protection Agency	636	0	0	0	461	0	175	0	0
National Aeronautics and Space Admin ..	3,088	0	1,543	0	271	0	1,274	0	0
National Science Foundation	9,943	0	373	0	8,219	0	1,351	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univ and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
District of Columbia, total	2,232,284	1,732,539	167,567	0	155,363	0	175,954	390	471
Department of Agriculture	156,292	145,849	9,168	0	679	0	463	0	133
Department of Commerce	18,076	15,992	380	0	807	0	897	0	0
Department of Defense, research ²	206,403	182,551	7,988	0	11,266	0	4,542	0	56
Department of Defense, total development ^{3 4}	815,832	677,412	98,455	0	37,071	0	2,504	390	0
Department of Energy	263,098	245,628	2,878	0	3,418	0	11,174	0	0
Department of Health & Human Svcs	195,212	74,440	12,589	0	75,004	0	33,155	0	24
Department of the Interior	2,757	2,509	173	0	25	0	50	0	0
Department of Transportation	131,979	77,619	16,787	0	11,174	0	26,141	0	258
Environmental Protection Agency	62,118	51,470	465	0	167	0	10,016	0	0
National Aeronautics and Space Admin ..	305,791	255,871	13,234	0	8,088	0	28,598	0	0
National Science Foundation	74,726	3,198	5,450	0	7,664	0	58,414	0	0
Florida, total	3,326,418	649,376	2,363,556	0	296,270	0	11,009	0	6,207
Department of Agriculture	29,869	19,638	0	0	10,216	0	15	0	0
Department of Commerce	36,926	27,901	2,476	0	6,028	0	59	0	462
Department of Defense, research ²	145,230	58,860	53,339	0	32,463	0	568	0	0
Department of Defense, total development ^{3 4}	1,891,651	269,691	1,605,226	0	14,534	0	0	0	2,200
Department of Energy	65,665	0	45,793	0	19,872	0	0	0	0
Department of Health & Human Svcs	143,449	9	9,433	0	128,130	0	5,745	0	132
Department of the Interior	24,874	22,780	16	0	1,917	0	0	0	161
Department of Transportation	3,880	0	372	0	559	0	0	0	2,949
Environmental Protection Agency	10,644	7,720	362	0	2,020	0	542	0	0
National Aeronautics and Space Admin ..	908,821	242,777	646,120	0	18,385	0	1,236	0	303
National Science Foundation	65,409	0	419	0	62,146	0	2,844	0	0
Georgia, total	3,919,868	225,150	3,444,087	0	240,003	0	7,021	0	3,607
Department of Agriculture	47,635	33,644	0	0	13,478	0	445	0	68
Department of Commerce	1,667	379	52	0	684	0	552	0	0
Department of Defense, research ²	37,727	2,225	13,470	0	21,822	0	210	0	0
Department of Defense, total development ^{3 4}	3,434,654	12,587	3,407,361	0	12,025	0	2,681	0	0
Department of Energy	10,494	0	233	0	9,866	0	395	0	0
Department of Health & Human Svcs	294,638	154,211	3,333	0	135,797	0	1,295	0	2
Department of the Interior	11,590	11,094	63	0	433	0	0	0	0
Department of Transportation	11,771	40	9,630	0	635	0	187	0	1,279
Environmental Protection Agency	14,031	10,294	126	0	3,241	0	370	0	0
National Aeronautics and Space Admin ..	22,093	676	8,922	0	11,729	0	766	0	0
National Science Foundation	33,568	0	897	0	30,293	0	120	0	2,258
Hawaii, total	150,722	54,318	25,893	0	56,337	0	13,207	0	967
Department of Agriculture	21,250	10,015	0	0	5,871	0	5,364	0	0
Department of Commerce	12,839	8,760	777	0	3,172	0	0	0	130
Department of Defense, research ²	17,342	2,511	7,706	0	7,125	0	0	0	0
Department of Defense, total development ^{3 4}	43,368	27,071	15,360	0	937	0	0	0	0
Department of Energy	3,005	0	0	0	2,814	0	191	0	0
Department of Health & Human Svcs	20,938	0	683	0	15,882	0	3,823	0	550
Department of the Interior	5,988	5,811	18	0	159	0	0	0	0
Department of Transportation	383	0	0	0	96	0	0	0	287
Environmental Protection Agency	140	0	0	0	140	0	0	0	0
National Aeronautics and Space Admin ..	6,932	150	955	0	3,336	0	2,491	0	0
National Science Foundation	18,537	0	394	0	16,805	0	1,338	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Idaho, total	205,660	24,092	110,729	56,664	13,609	0	315	0	251
Department of Agriculture	17,166	12,982	0	0	3,981	0	181	0	22
Department of Commerce	1,538	1,411	52	0	75	0	0	0	0
Department of Defense, research ²	4,325	91	158	2,498	1,578	0	0	0	0
Department of Defense, total development ^{3 4}	6,653	1,139	3,211	2,303	0	0	0	0	0
Department of Energy	159,735	900	105,613	50,693	2,529	0	0	0	0
Department of Health & Human Svcs	1,538	0	232	0	1,172	0	134	0	0
Department of the Interior	8,934	7,479	13	0	1,442	0	0	0	0
Department of Transportation	2,416	0	1,107	1,080	0	0	0	0	229
Environmental Protection Agency	288	0	0	0	288	0	0	0	0
National Aeronautics and Space Admin ..	570	90	262	90	128	0	0	0	0
National Science Foundation	2,497	0	81	0	2,416	0	0	0	0
Illinois, total	1,140,163	77,224	114,294	0	465,934	422,522	54,309	0	5,880
Department of Agriculture	41,089	29,030	0	0	11,625	0	434	0	0
Department of Commerce	14,973	65	12,239	0	1,391	3	650	0	625
Department of Defense, research ²	61,075	13,145	9,465	0	37,711	621	133	0	0
Department of Defense, total development ^{3 4}	84,181	27,469	47,758	0	5,378	2,725	851	0	0
Department of Energy	474,034	2,148	22,160	0	30,518	418,909	299	0	0
Department of Health & Human Svcs	314,840	814	9,137	0	256,683	0	44,420	0	3,786
Department of the Interior	3,735	3,462	0	0	253	0	20	0	0
Department of Transportation	11,128	260	8,076	0	443	0	1,075	0	1,274
Environmental Protection Agency	2,409	0	179	0	2,230	0	0	0	0
National Aeronautics and Space Admin ..	17,938	831	4,016	0	11,856	264	776	0	195
National Science Foundation	114,761	0	1,264	0	107,846	0	5,651	0	0
Indiana, total	410,646	68,272	138,563	0	197,947	0	3,588	0	2,276
Department of Agriculture	16,956	4,685	82	0	12,182	0	7	0	0
Department of Commerce	869	18	323	0	528	0	0	0	0
Department of Defense, research ²	19,889	1,642	4,458	0	13,770	0	19	0	0
Department of Defense, total development ^{3 4}	181,474	56,296	122,271	0	169	0	2,738	0	0
Department of Energy	28,212	0	1,938	0	26,274	0	0	0	0
Department of Health & Human Svcs	100,809	166	4,514	0	94,824	0	104	0	1,201
Department of the Interior	5,041	4,894	25	0	122	0	0	0	0
Department of Transportation	1,075	0	0	0	0	0	0	0	1,075
Environmental Protection Agency	1,942	0	117	0	1,153	0	672	0	0
National Aeronautics and Space Admin ..	7,872	571	4,360	0	2,897	0	44	0	0
National Science Foundation	46,507	0	475	0	46,028	0	4	0	0
Iowa, total	228,180	29,043	33,365	0	139,714	20,450	3,252	0	2,356
Department of Agriculture	41,080	25,748	0	0	15,332	0	0	0	0
Department of Commerce	1,225	0	190	0	1,035	0	0	0	0
Department of Defense, research ²	9,396	0	5,308	0	4,008	80	0	0	0
Department of Defense, total development ^{3 4}	27,929	326	25,275	0	845	1,483	0	0	0
Department of Energy	25,510	0	1,001	0	3,922	18,887	1,700	0	0
Department of Health & Human Svcs	92,903	9	747	0	90,301	0	1,552	0	294
Department of the Interior	3,076	2,960	0	0	116	0	0	0	0
Department of Transportation	4,925	0	0	0	2,863	0	0	0	2,062
Environmental Protection Agency	2,162	0	70	0	2,092	0	0	0	0
National Aeronautics and Space Admin ..	6,717	0	755	0	5,962	0	0	0	0
National Science Foundation	13,257	0	19	0	13,238	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Kansas, total	255,490	15,622	171,241	0	63,749	0	1,328	0	3,550
Department of Agriculture	13,078	6,529	0	0	6,549	0	0	0	0
Department of Commerce	564	102	0	0	0	0	462	0	0
Department of Defense, research ²	2,791	451	259	0	2,081	0	0	0	0
Department of Defense, total development ^{3 4}	171,027	2,871	167,871	0	282	0	3	0	0
Department of Energy	4,401	0	233	0	4,168	0	0	0	0
Department of Health & Human Svcs	37,570	803	1,814	0	31,164	0	707	0	3,082
Department of the Interior	4,961	4,866	14	0	81	0	0	0	0
Department of Transportation	542	0	0	0	74	0	0	0	468
Environmental Protection Agency	2,849	0	85	0	2,608	0	156	0	0
National Aeronautics and Space Admin ..	3,774	0	942	0	2,832	0	0	0	0
National Science Foundation	13,933	0	23	0	13,910	0	0	0	0
Kentucky, total	91,291	7,289	7,436	0	71,617	0	1,086	0	3,863
Department of Agriculture	8,474	1	0	0	8,473	0	0	0	0
Department of Commerce	184	54	0	0	0	0	130	0	0
Department of Defense, research ²	2,708	656	101	0	1,951	0	0	0	0
Department of Defense, total development ^{3 4}	6,822	3,839	2,368	0	615	0	0	0	0
Department of Energy	5,698	0	1,434	0	4,264	0	0	0	0
Department of Health & Human Svcs	51,828	0	3,093	0	44,687	0	896	0	3,152
Department of the Interior	2,895	2,739	10	0	146	0	0	0	0
Department of Transportation	866	0	155	0	0	0	0	0	711
Environmental Protection Agency	974	0	143	0	771	0	60	0	0
National Aeronautics and Space Admin ..	1,552	0	45	0	1,507	0	0	0	0
National Science Foundation	9,290	0	87	0	9,203	0	0	0	0
Louisiana, total	211,036	47,910	31,766	0	123,586	0	4,214	0	3,560
Department of Agriculture	32,823	24,723	0	0	8,042	0	58	0	0
Department of Commerce	8,011	5,836	625	0	1,035	0	515	0	0
Department of Defense, research ²	15,880	0	574	0	15,234	0	72	0	0
Department of Defense, total development ^{3 4}	14,888	957	6,731	0	7,200	0	0	0	0
Department of Energy	9,989	0	85	0	9,904	0	0	0	0
Department of Health & Human Svcs	64,520	3,916	166	0	57,017	0	3,420	0	1
Department of the Interior	15,148	12,478	684	0	1,986	0	0	0	0
Department of Transportation	803	0	131	0	0	0	0	0	672
Environmental Protection Agency	6,651	0	0	0	6,502	0	149	0	0
National Aeronautics and Space Admin ..	27,174	0	22,645	0	4,529	0	0	0	0
National Science Foundation	15,149	0	125	0	12,137	0	0	0	2,887
Maine, total	68,683	5,685	19,962	0	13,866	0	26,791	0	2,379
Department of Agriculture	4,529	381	0	0	4,104	0	1	0	43
Department of Commerce	5,335	3,585	0	0	1,417	0	333	0	0
Department of Defense, research ²	5,027	68	4,119	0	806	0	34	0	0
Department of Defense, total development ^{3 4}	14,512	303	13,783	0	426	0	0	0	0
Department of Energy	2,035	0	60	0	796	0	579	0	600
Department of Health & Human Svcs	26,601	0	1,797	0	1,165	0	22,222	0	1,417
Department of the Interior	1,806	1,348	16	0	442	0	0	0	0
Department of Transportation	151	0	37	0	0	0	0	0	114
Environmental Protection Agency	683	0	0	0	683	0	0	0	0
National Aeronautics and Space Admin ..	1,091	0	56	0	430	0	400	0	205
National Science Foundation	6,913	0	94	0	3,597	0	3,222	0	0

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Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Maryland, total	7,328,937	4,569,181	1,740,648	156,946	700,293	0	154,995	4,082	2,792
Department of Agriculture	124,859	117,658	90	0	6,863	0	115	0	133
Department of Commerce	337,400	320,265	10,014	0	6,847	0	274	0	0
Department of Defense, research ²	362,974	220,001	106,300	0	34,223	0	2,450	0	0
Department of Defense, total development ^{3 4}	2,270,735	1,295,747	822,285	0	148,301	0	3,234	808	360
Department of Energy	50,605	22,837	10,475	0	11,676	0	5,617	0	0
Department of Health & Human Svcs	3,004,910	2,226,541	214,216	156,946	356,566	0	49,711	0	930
Department of the Interior	17,555	16,815	407	0	328	0	5	0	0
Department of Transportation	33,540	5,578	24,923	0	2,296	0	0	0	743
Environmental Protection Agency	11,600	0	3,499	0	7,624	0	77	0	400
National Aeronautics and Space Admin ..	1,057,414	340,792	541,642	0	81,768	0	89,712	3,274	226
National Science Foundation	57,345	2,947	6,797	0	43,801	0	3,800	0	0
Massachusetts, total	3,437,962	361,118	1,308,755	0	792,569	156,418	652,158	162,735	4,209
Department of Agriculture	21,406	15,372	63	0	5,713	0	249	0	9
Department of Commerce	51,887	38,181	7,765	0	4,147	0	1,794	0	0
Department of Defense, research ²	296,935	56,922	103,494	0	86,450	26,229	19,488	4,352	0
Department of Defense, total development ^{3 4}	1,522,382	182,520	1,024,664	0	12,287	130,039	14,489	158,383	0
Department of Energy	109,045	18	30,105	0	74,435	0	4,487	0	0
Department of Health & Human Svcs	1,048,408	1,659	90,034	0	411,247	0	542,872	0	2,596
Department of the Interior	6,434	5,903	9	0	522	0	0	0	0
Department of Transportation	43,819	27,630	12,693	0	1,892	0	0	0	1,604
Environmental Protection Agency	14,755	0	2,003	0	7,576	0	5,176	0	0
National Aeronautics and Space Admin ..	153,619	30,832	25,944	0	49,356	150	47,337	0	0
National Science Foundation	169,272	2,081	11,981	0	138,944	0	16,266	0	0
Michigan, total	735,221	107,749	166,289	0	425,543	0	31,743	0	3,897
Department of Agriculture	20,749	6,435	82	0	14,232	0	0	0	0
Department of Commerce	29,343	6,073	20,621	0	1,595	0	1,054	0	0
Department of Defense, research ²	53,929	17,371	14,257	0	21,681	0	620	0	0
Department of Defense, total development ^{3 4}	197,405	69,664	103,717	0	8,540	0	15,469	0	15
Department of Energy	12,570	0	0	0	12,570	0	0	0	0
Department of Health & Human Svcs	291,306	836	13,288	0	268,066	0	6,362	0	2,754
Department of the Interior	7,519	7,370	7	0	104	0	0	0	38
Department of Transportation	4,657	0	1,190	0	2,478	0	0	0	989
Environmental Protection Agency	15,754	0	7,854	0	5,879	0	1,920	0	101
National Aeronautics and Space Admin ..	19,031	0	3,657	0	10,827	0	4,547	0	0
National Science Foundation	82,958	0	1,616	0	79,571	0	1,771	0	0
Minnesota, total	609,395	34,573	286,173	0	193,278	0	91,783	0	3,588
Department of Agriculture	21,735	13,170	0	0	8,274	0	224	0	67
Department of Commerce	10,470	185	8,244	0	768	0	650	0	623
Department of Defense, research ²	28,012	442	17,932	0	7,740	0	1,898	0	0
Department of Defense, total development ^{3 4}	274,175	821	247,543	0	865	0	24,946	0	0
Department of Energy	6,334	0	70	0	6,264	0	0	0	0
Department of Health & Human Svcs	203,687	800	8,009	0	129,466	0	63,062	0	2,350
Department of the Interior	6,443	6,288	8	0	147	0	0	0	0
Department of Transportation	1,197	0	552	0	97	0	0	0	548
Environmental Protection Agency	15,386	12,867	0	0	1,918	0	601	0	0
National Aeronautics and Space Admin ..	6,441	0	2,946	0	3,093	0	402	0	0
National Science Foundation	35,515	0	869	0	34,646	0	0	0	0

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Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Mississippi, total	289,791	165,297	72,030	0	44,569	0	6,659	0	1,236
Department of Agriculture	54,282	37,831	0	0	15,516	0	935	0	0
Department of Commerce	9,415	7,815	617	0	358	0	0	0	625
Department of Defense, research ²	33,061	23,591	2,351	0	6,266	0	853	0	0
Department of Defense, total development ^{3 4}	80,323	47,394	32,298	0	240	0	391	0	0
Department of Energy	1,060	0	40	0	1,020	0	0	0	0
Department of Health & Human Svcs	14,330	0	370	0	12,748	0	1,211	0	1
Department of the Interior	3,384	3,288	11	0	85	0	0	0	0
Department of Transportation	3,118	2,063	132	0	313	0	0	0	610
Environmental Protection Agency	893	0	0	0	743	0	150	0	0
National Aeronautics and Space Admin ..	84,164	43,315	36,209	0	1,521	0	3,119	0	0
National Science Foundation	5,761	0	2	0	5,759	0	0	0	0
Missouri, total	1,130,148	50,526	786,905	0	267,999	0	21,003	0	3,715
Department of Agriculture	22,686	9,332	90	0	13,264	0	0	0	0
Department of Commerce	282	83	0	0	15	0	184	0	0
Department of Defense, research ²	20,775	600	12,398	0	7,777	0	0	0	0
Department of Defense, total development ^{3 4}	792,178	29,073	762,875	0	230	0	0	0	0
Department of Energy	3,165	0	0	0	3,149	0	16	0	0
Department of Health & Human Svcs	236,635	20	847	0	215,668	0	17,905	0	2,195
Department of the Interior	11,765	11,108	19	0	583	0	0	0	55
Department of Transportation	3,258	235	0	0	42	0	1,516	0	1,465
Environmental Protection Agency	283	0	0	0	283	0	0	0	0
National Aeronautics and Space Admin ..	16,009	75	10,548	0	5,386	0	0	0	0
National Science Foundation	23,112	0	128	0	21,602	0	1,382	0	0
Montana, total	79,347	33,199	10,103	0	32,117	0	3,561	0	367
Department of Agriculture	18,832	11,184	20	0	6,240	0	1,388	0	0
Department of Commerce	1,664	0	0	0	1,200	0	464	0	0
Department of Defense, research ²	5,236	42	1,286	0	3,908	0	0	0	0
Department of Defense, total development ^{3 4}	8,249	752	7,497	0	0	0	0	0	0
Department of Energy	1,565	0	131	0	935	0	499	0	0
Department of Health & Human Svcs	22,555	15,175	690	0	5,548	0	1,141	0	1
Department of the Interior	6,707	6,046	22	0	639	0	0	0	0
Department of Transportation	503	0	0	0	137	0	0	0	366
Environmental Protection Agency	330	0	0	0	330	0	0	0	0
National Aeronautics and Space Admin ..	4,249	0	255	0	3,925	0	69	0	0
National Science Foundation	9,457	0	202	0	9,255	0	0	0	0
Nebraska, total	82,981	23,741	5,761	0	47,959	0	5,026	0	494
Department of Agriculture	26,528	17,380	0	0	9,148	0	0	0	0
Department of Commerce	119	0	0	0	21	0	0	0	98
Department of Defense, research ²	3,120	603	1,273	0	1,244	0	0	0	0
Department of Defense, total development ^{3 4}	4,876	580	3,075	0	1,221	0	0	0	0
Department of Energy	861	0	0	0	861	0	0	0	0
Department of Health & Human Svcs	28,627	4	918	0	22,615	0	5,026	0	64
Department of the Interior	5,311	5,174	0	0	137	0	0	0	0
Department of Transportation	587	0	62	0	193	0	0	0	332
National Aeronautics and Space Admin ..	2,355	0	312	0	2,043	0	0	0	0
National Science Foundation	10,597	0	121	0	10,476	0	0	0	0

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Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Nevada, total	295,042	46,025	224,446	0	21,714	0	2,188	0	669
Department of Agriculture	2,214	438	80	0	1,664	0	32	0	0
Department of Commerce	161	59	2	0	100	0	0	0	0
Department of Defense, research ²	9,066	6,271	2,088	0	707	0	0	0	0
Department of Defense, total development ^{3 4}	23,634	15,969	7,665	0	0	0	0	0	0
Department of Energy	208,845	0	205,675	0	2,249	0	921	0	0
Department of Health & Human Svcs	9,364	0	402	0	7,311	0	1,235	0	416
Department of the Interior	10,716	10,221	0	0	495	0	0	0	0
Department of Transportation	6,583	0	6,330	0	0	0	0	0	253
Environmental Protection Agency	15,141	12,867	1,292	0	982	0	0	0	0
National Aeronautics and Space Admin ..	1,517	200	636	0	681	0	0	0	0
National Science Foundation	7,801	0	276	0	7,525	0	0	0	0
New Hampshire, total	278,697	36,861	172,829	0	66,405	0	2,235	0	367
Department of Agriculture	4,399	2,071	0	0	2,310	0	7	0	11
Department of Commerce	3,094	188	1,662	0	1,244	0	0	0	0
Department of Defense, research ²	30,463	9,539	14,214	0	5,036	0	1,674	0	0
Department of Defense, total development ^{3 4}	173,194	22,425	149,542	0	892	0	335	0	0
Department of Energy	921	0	0	0	921	0	0	0	0
Department of Health & Human Svcs	39,531	4	2,994	0	36,145	0	196	0	192
Department of the Interior	1,615	1,489	0	0	126	0	0	0	0
Department of Transportation	574	398	35	0	0	0	0	0	141
Environmental Protection Agency	1,151	0	0	0	1,151	0	0	0	0
National Aeronautics and Space Admin ..	11,927	122	3,684	0	8,075	0	23	0	23
National Science Foundation	11,828	625	698	0	10,505	0	0	0	0
New Jersey, total	1,318,793	459,286	588,294	0	198,521	52,485	15,641	1,961	2,605
Department of Agriculture	5,682	25	110	0	5,543	0	0	0	4
Department of Commerce	39,083	14,400	20,877	0	3,207	0	599	0	0
Department of Defense, research ²	107,631	49,844	34,409	0	23,155	132	23	68	0
Department of Defense, total development ^{3 4}	757,269	343,795	405,304	0	6,277	0	0	1,893	0
Department of Energy	79,324	0	13,221	0	13,435	52,353	315	0	0
Department of Health & Human Svcs	108,475	9	9,247	0	86,817	0	10,740	0	1,662
Department of the Interior	7,205	6,253	846	0	106	0	0	0	0
Department of Transportation	66,402	43,137	18,039	0	4,287	0	0	0	939
Environmental Protection Agency	3,794	0	440	0	1,035	0	2,319	0	0
National Aeronautics and Space Admin ..	94,717	1,657	82,518	0	10,362	0	180	0	0
National Science Foundation	49,211	166	3,283	0	44,297	0	1,465	0	0
New Mexico, total	1,933,123	366,253	252,260	650,823	92,218	559,638	10,362	253	1,316
Department of Agriculture	7,165	3,328	0	0	3,831	0	6	0	0
Department of Commerce	548	0	412	0	0	3	133	0	0
Department of Defense, research ²	118,612	57,638	27,750	8,673	21,794	2,385	372	0	0
Department of Defense, total development ^{3 4}	556,445	276,660	186,386	75,161	4,455	12,903	627	253	0
Department of Energy	1,117,476	10,169	9,360	565,378	3,557	525,522	3,490	0	0
Department of Health & Human Svcs	49,410	1,032	2,723	0	27,279	13,447	4,020	0	909
Department of the Interior	6,329	6,101	67	0	161	0	0	0	0
Department of Transportation	12,345	0	3,529	705	2,487	5,217	0	0	407
Environmental Protection Agency	671	0	271	0	200	0	200	0	0
National Aeronautics and Space Admin ..	51,401	11,220	20,043	906	18,750	65	417	0	0
National Science Foundation	12,721	105	1,719	0	9,704	96	1,097	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
New York, total	2,471,213	136,215	770,608	0	1,062,686	216,934	208,675	0	76,095
Department of Agriculture	33,864	15,848	172	0	16,528	0	1,316	0	0
Department of Commerce	12,554	641	5,008	0	6,239	13	653	0	0
Department of Defense, research ²	134,787	45,615	38,244	0	47,730	374	2,824	0	0
Department of Defense, total development ^{3 4}	486,620	54,507	423,025	0	7,752	303	1,033	0	0
Department of Energy	516,968	5,289	246,080	0	51,901	211,221	2,477	0	0
Department of Health & Human Svcs	1,015,997	2,239	26,778	0	720,661	3,845	188,505	0	73,969
Department of the Interior	9,181	8,858	59	0	264	0	0	0	0
Department of Transportation	7,939	0	5,607	0	0	0	428	0	1,904
Environmental Protection Agency	8,990	0	2,170	0	4,696	0	2,124	0	0
National Aeronautics and Space Admin ..	50,219	3,218	18,715	0	27,401	30	825	0	30
National Science Foundation	194,094	0	4,750	0	179,514	1,148	8,490	0	192
North Carolina, total	900,947	229,610	132,887	0	468,601	0	61,427	0	8,422
Department of Agriculture	30,130	14,240	5	0	15,857	0	19	0	9
Department of Commerce	20,300	4,963	12,055	0	2,694	0	160	0	428
Department of Defense, research ²	50,966	12,006	11,711	0	25,540	0	1,235	0	474
Department of Defense, total development ^{3 4}	99,994	39,491	55,928	0	4,575	0	0	0	0
Department of Energy	13,267	308	49	0	11,148	0	1,762	0	0
Department of Health & Human Svcs	481,292	70,151	21,704	0	344,107	0	43,553	0	1,777
Department of the Interior	6,761	6,100	309	0	352	0	0	0	0
Department of Transportation	8,257	0	0	0	1,773	0	750	0	5,734
Environmental Protection Agency	125,216	82,351	27,352	0	8,253	0	7,260	0	0
National Aeronautics and Space Admin ..	15,173	0	1,026	0	9,125	0	5,022	0	0
National Science Foundation	49,591	0	2,748	0	45,177	0	1,666	0	0
North Dakota, total	53,015	26,401	312	0	23,655	0	449	0	2,198
Department of Agriculture	25,018	19,468	0	0	5,550	0	0	0	0
Department of Commerce	358	0	0	0	358	0	0	0	0
Department of Defense, research ²	1,743	0	0	0	1,743	0	0	0	0
Department of Defense, total development ^{3 4}	491	491	0	0	0	0	0	0	0
Department of Energy	3,746	0	0	0	3,746	0	0	0	0
Department of Health & Human Svcs	3,540	0	7	0	2,819	0	449	0	265
Department of the Interior	6,485	6,442	3	0	20	0	0	0	20
Department of Transportation	5,843	0	86	0	3,844	0	0	0	1,913
Environmental Protection Agency	2,310	0	0	0	2,310	0	0	0	0
National Aeronautics and Space Admin ..	1,000	0	65	0	935	0	0	0	0
National Science Foundation	2,481	0	151	0	2,330	0	0	0	0
Ohio, total	1,879,784	681,170	776,770	0	327,760	0	91,782	0	2,302
Department of Agriculture	15,303	6,376	10	0	8,876	0	34	0	7
Department of Commerce	10,267	72	8,853	0	938	0	404	0	0
Department of Defense, research ²	288,247	185,271	68,341	0	21,176	0	13,459	0	0
Department of Defense, total development ^{3 4}	655,191	197,607	445,544	0	7,815	0	4,225	0	0
Department of Energy	17,781	0	10,187	0	7,594	0	0	0	0
Department of Health & Human Svcs	326,484	32,593	11,747	0	223,213	0	58,258	0	673
Department of the Interior	3,635	3,394	11	0	230	0	0	0	0
Department of Transportation	12,712	4,377	5,009	0	1,869	0	70	0	1,387
Environmental Protection Agency	61,580	48,896	6,279	0	2,313	0	4,092	0	0
National Aeronautics and Space Admin ..	448,477	202,584	219,620	0	15,052	0	10,986	0	235
National Science Foundation	40,107	0	1,169	0	38,684	0	254	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Oklahoma, total	160,356	44,238	53,782	0	52,831	0	8,646	0	859
Department of Agriculture	17,271	9,370	0	0	7,901	0	0	0	0
Department of Commerce	8,075	7,336	588	0	151	0	0	0	0
Department of Defense, research ²	7,844	81	4,072	0	3,691	0	0	0	0
Department of Defense, total development ^{3 4}	30,375	6,593	23,662	0	80	0	0	0	40
Department of Energy	28,522	1,490	23,658	0	3,069	0	305	0	0
Department of Health & Human Svcs	32,408	9	112	0	24,052	0	8,116	0	119
Department of the Interior	3,763	3,500	0	0	263	0	0	0	0
Department of Transportation	9,808	8,081	1,027	0	0	0	0	0	700
Environmental Protection Agency	9,088	7,720	117	0	1,251	0	0	0	0
National Aeronautics and Space Admin ..	2,049	58	310	0	1,681	0	0	0	0
National Science Foundation	11,153	0	236	0	10,692	0	225	0	0
Oregon, total	319,587	90,017	28,339	0	157,943	0	37,112	0	6,176
Department of Agriculture	37,697	22,609	82	0	14,714	0	278	0	14
Department of Commerce	20,875	15,548	1,657	0	2,465	0	0	0	1,205
Department of Defense, research ²	19,762	2	9,664	0	10,096	0	0	0	0
Department of Defense, total development ^{3 4}	3,229	633	2,440	0	156	0	0	0	0
Department of Energy	46,084	28,695	135	0	16,954	0	300	0	0
Department of Health & Human Svcs	121,710	13	7,500	0	73,740	0	36,129	0	4,328
Department of the Interior	9,802	9,605	94	0	103	0	0	0	0
Department of Transportation	1,622	0	385	0	608	0	0	0	629
Environmental Protection Agency	21,840	12,867	4,058	0	4,815	0	100	0	0
National Aeronautics and Space Admin ..	6,565	0	1,223	0	5,134	0	208	0	0
National Science Foundation	30,401	45	1,101	0	29,158	0	97	0	0
Pennsylvania, total	1,893,867	151,216	775,429	0	767,992	16,395	175,456	0	7,379
Department of Agriculture	40,848	28,859	0	0	11,730	0	259	0	0
Department of Commerce	27,121	240	24,089	0	1,327	0	850	0	615
Department of Defense, research ²	121,299	6,862	25,140	0	63,133	16,395	9,769	0	0
Department of Defense, total development ^{3 4}	493,667	45,643	400,029	0	27,098	0	20,897	0	0
Department of Energy	351,742	42,843	277,311	0	21,035	0	5,363	0	5,190
Department of Health & Human Svcs	684,859	17,778	13,792	0	529,543	0	123,649	0	97
Department of the Interior	8,710	7,828	109	0	758	0	15	0	0
Department of Transportation	6,213	70	2,604	0	2,062	0	0	0	1,477
Environmental Protection Agency	6,343	0	809	0	5,200	0	334	0	0
National Aeronautics and Space Admin ..	49,464	1,093	30,402	0	16,480	0	1,489	0	0
National Science Foundation	103,601	0	1,144	0	89,626	0	12,831	0	0
Rhode Island, total	403,844	202,192	112,220	0	66,291	0	22,121	0	1,020
Department of Agriculture	1,948	2	0	0	1,902	0	44	0	0
Department of Commerce	4,954	1,075	1,650	0	2,219	0	10	0	0
Department of Defense, research ²	27,627	271	17,502	0	9,763	0	91	0	0
Department of Defense, total development ^{3 4}	280,131	188,694	90,875	0	562	0	0	0	0
Department of Energy	2,855	0	0	0	2,847	0	8	0	0
Department of Health & Human Svcs	49,652	0	1,700	0	26,159	0	20,948	0	845
Department of the Interior	1,732	1,238	0	0	489	0	5	0	0
Department of Transportation	796	438	183	0	0	0	0	0	175
Environmental Protection Agency	10,753	10,296	57	0	400	0	0	0	0
National Aeronautics and Space Admin ..	3,573	178	243	0	2,894	0	258	0	0
National Science Foundation	19,823	0	10	0	19,056	0	757	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
South Carolina, total	166,607	34,019	13,252	17,184	94,954	0	3,799	0	3,399
Department of Agriculture	14,399	7,998	0	0	6,351	0	50	0	0
Department of Commerce	14,342	6,538	5,289	0	2,246	0	269	0	0
Department of Defense, research ²	22,711	1,104	835	0	20,772	0	0	0	0
Department of Defense, total development ^{3 4}	25,531	15,038	5,205	9	3,521	0	1,758	0	0
Department of Energy	29,922	6	500	17,175	10,825	0	1,416	0	0
Department of Health & Human Svcs	39,756	4	1,189	0	35,537	0	250	0	2,776
Department of the Interior	3,432	3,331	46	0	45	0	10	0	0
Department of Transportation	924	0	41	0	305	0	0	0	578
Environmental Protection Agency	1,239	0	0	0	1,239	0	0	0	0
National Aeronautics and Space Admin ..	2,829	0	60	0	2,769	0	0	0	0
National Science Foundation	11,522	0	87	0	11,344	0	46	0	45
South Dakota, total	41,955	19,307	6,480	0	14,075	0	1,500	0	593
Department of Agriculture	6,967	3,676	0	0	3,291	0	0	0	0
Department of Commerce	334	70	0	0	55	0	0	0	209
Department of Defense, research ²	1,020	0	97	0	923	0	0	0	0
Department of Defense, total development ^{3 4}	1,995	585	383	0	1,027	0	0	0	0
Department of Energy	79	0	79	0	0	0	0	0	0
Department of Health & Human Svcs	2,855	766	380	0	1,584	0	0	0	125
Department of the Interior	12,347	7,332	4,887	0	128	0	0	0	0
Department of Transportation	367	0	108	0	0	0	0	0	259
National Aeronautics and Space Admin ..	8,905	6,878	102	0	425	0	1,500	0	0
National Science Foundation	7,086	0	444	0	6,642	0	0	0	0
Tennessee, total	566,242	77,836	44,089	228,095	179,732	9,430	25,583	0	1,477
Department of Agriculture	7,961	1	0	0	7,960	0	0	0	0
Department of Commerce	1,198	811	0	0	379	8	0	0	0
Department of Defense, research ²	14,867	2,244	980	2,319	9,324	0	0	0	0
Department of Defense, total development ^{3 4}	78,556	60,341	14,792	2,545	878	0	0	0	0
Department of Energy	248,998	1,166	10,872	220,061	7,793	8,996	110	0	0
Department of Health & Human Svcs	160,546	1,276	1,962	0	131,659	276	25,373	0	0
Department of the Interior	4,403	3,986	17	0	400	0	0	0	0
Department of Transportation	2,617	933	24	120	188	0	0	0	1,352
Environmental Protection Agency	1,203	0	339	0	864	0	0	0	0
National Aeronautics and Space Admin ..	28,629	6,829	13,244	3,050	5,381	0	0	0	125
National Science Foundation	17,264	249	1,859	0	14,906	150	100	0	0
Texas, total	3,640,162	559,634	2,336,624	0	656,705	0	80,394	1,054	5,751
Department of Agriculture	61,263	43,311	79	0	17,843	0	30	0	0
Department of Commerce	13,007	3,023	6,820	0	2,864	0	0	0	300
Department of Defense, research ²	122,477	42,821	40,382	0	37,048	0	2,226	0	0
Department of Defense, total development ^{3 4}	1,095,139	90,838	988,832	0	14,255	0	160	1,054	0
Department of Energy	24,896	0	4,928	0	19,646	0	322	0	0
Department of Health & Human Svcs	495,579	2,159	12,390	0	444,213	0	35,996	0	821
Department of the Interior	14,283	11,254	812	0	1,916	0	301	0	0
Department of Transportation	9,831	0	4,309	0	1,272	0	0	0	4,250
Environmental Protection Agency	11,742	0	1,873	0	8,000	0	1,669	0	200
National Aeronautics and Space Admin ..	1,713,888	366,228	1,274,612	0	33,487	0	39,381	0	180
National Science Foundation	78,057	0	1,587	0	76,161	0	309	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
Utah, total	319,826	117,231	68,306	0	130,820	0	2,691	0	778
Department of Agriculture	13,064	7,065	0	0	5,999	0	0	0	0
Department of Commerce	1,747	0	1,295	0	452	0	0	0	0
Department of Defense, research ²	10,613	1,961	3,363	0	5,289	0	0	0	0
Department of Defense, total development ^{3 4}	174,868	104,059	55,295	0	15,514	0	0	0	0
Department of Energy	6,027	0	821	0	4,501	0	705	0	0
Department of Health & Human Svcs	77,998	38	3,570	0	73,491	0	809	0	90
Department of the Interior	4,086	3,861	58	0	167	0	0	0	0
Department of Transportation	1,531	0	51	0	14	0	778	0	688
Environmental Protection Agency	748	0	290	0	458	0	0	0	0
National Aeronautics and Space Admin ..	10,177	247	2,405	0	7,375	0	150	0	0
National Science Foundation	18,967	0	1,158	0	17,560	0	249	0	0
Vermont, total	49,885	7,400	7,614	0	32,852	0	955	0	1,064
Department of Agriculture	5,584	1,544	0	0	4,029	0	0	0	11
Department of Commerce	223	24	52	0	40	0	0	0	107
Department of Defense, research ²	770	2	426	0	342	0	0	0	0
Department of Defense, total development ^{3 4}	9,568	3,946	5,342	0	280	0	0	0	0
Department of Energy	250	0	0	0	250	0	0	0	0
Department of Health & Human Svcs	25,344	0	1,061	0	23,519	0	764	0	0
Department of the Interior	1,920	1,884	8	0	28	0	0	0	0
Department of Transportation	1,154	0	39	0	169	0	0	0	946
Environmental Protection Agency	371	0	0	0	180	0	191	0	0
National Aeronautics and Space Admin ..	790	0	559	0	231	0	0	0	0
National Science Foundation	3,911	0	127	0	3,784	0	0	0	0
Virginia, total	4,849,753	1,654,696	2,718,179	0	226,968	62,434	36,922	143,214	7,340
Department of Agriculture	10,526	799	82	0	8,743	0	838	0	64
Department of Commerce	17,973	6,609	9,061	0	2,263	0	40	0	0
Department of Defense, research ²	318,214	104,385	173,118	0	28,245	1,300	3,211	7,948	7
Department of Defense, total development ^{3 4}	3,557,608	1,189,077	2,229,541	0	7,268	0	2,604	128,968	150
Department of Energy	91,843	11,506	7,295	0	8,984	61,134	2,924	0	0
Department of Health & Human Svcs	149,469	710	29,532	0	109,322	0	8,395	349	1,161
Department of the Interior	93,401	91,793	41	0	1,087	0	480	0	0
Department of Transportation	40,372	1,238	20,795	0	6,268	0	600	5,590	5,881
Environmental Protection Agency	18,866	0	12,697	0	3,012	0	3,157	0	0
National Aeronautics and Space Admin ..	490,543	245,167	212,567	0	19,915	0	12,817	0	77
National Science Foundation	60,938	3,412	23,450	0	31,861	0	1,856	359	0
Washington, total	1,226,154	167,356	451,601	0	344,568	0	114,787	143,527	4,315
Department of Agriculture	35,561	20,384	164	0	14,754	0	249	0	10
Department of Commerce	60,774	54,471	2,299	0	3,619	0	75	0	310
Department of Defense, research ²	45,244	1,991	14,193	0	26,376	0	593	2,091	0
Department of Defense, total development ^{3 4}	382,227	72,744	304,257	0	2,479	0	99	2,648	0
Department of Energy	180,884	0	30,451	0	18,687	0	248	131,498	0
Department of Health & Human Svcs	364,610	5,019	17,037	0	221,177	0	111,318	7,103	2,956
Department of the Interior	12,010	10,337	14	0	1,614	0	0	0	45
Department of Transportation	4,258	0	3,056	0	153	0	155	0	894
Environmental Protection Agency	3,839	0	70	0	3,117	0	552	0	100
National Aeronautics and Space Admin ..	89,007	2,371	77,868	0	8,553	0	60	155	0
National Science Foundation	47,740	39	2,192	0	44,039	0	1,438	32	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra-mural ¹	Extramural						
			Industrial firms	FFRDCs admin by industrial firms	Universities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institutions	FFRDCs admin by nonprofit institutions	State and local govts
West Virginia, total	193,061	86,663	39,734	0	23,560	30,813	10,942	0	1,349
Department of Agriculture	20,111	15,345	0	0	3,491	0	1,240	0	35
Department of Commerce	1,496	1,021	0	0	0	0	475	0	0
Department of Defense, research ²	8,825	1	1,468	0	3,829	0	3,527	0	0
Department of Defense, total development ^{3 4}	6,750	301	6,407	0	0	0	42	0	0
Department of Energy	69,300	41,668	22,762	0	3,606	0	1,264	0	0
Department of Health & Human Svcs	31,646	21,795	1,050	0	7,880	0	0	0	921
Department of the Interior	6,747	6,532	8	0	112	0	0	0	95
Department of Transportation	1,491	0	941	0	252	0	0	0	298
National Aeronautics and Space Admin ..	11,334	0	7,020	0	4,130	0	184	0	0
National Science Foundation	35,361	0	78	0	260	30,813	4,210	0	0
Wisconsin, total	332,214	42,606	28,994	0	247,731	0	8,721	0	4,162
Department of Agriculture	35,637	23,739	26	0	11,789	0	83	0	0
Department of Commerce	4,040	590	1,666	0	1,784	0	0	0	0
Department of Defense, research ²	12,847	53	5,371	0	7,423	0	0	0	0
Department of Defense, total development ^{3 4}	9,074	300	6,372	0	1,202	0	0	0	1,200
Department of Energy	17,248	0	213	0	17,035	0	0	0	0
Department of Health & Human Svcs	170,359	20	4,600	0	155,890	0	8,638	0	1,211
Department of the Interior	17,156	16,895	4	0	244	0	0	0	13
Department of Transportation	3,787	1,009	41	0	1,511	0	0	0	1,226
Environmental Protection Agency	2,349	0	0	0	1,901	0	0	0	448
National Aeronautics and Space Admin ..	19,377	0	10,096	0	9,281	0	0	0	0
National Science Foundation	40,340	0	605	0	39,671	0	0	0	64
Wyoming, total	28,368	8,720	675	0	16,169	0	2,469	0	335
Department of Agriculture	7,243	4,555	0	0	2,688	0	0	0	0
Department of Commerce	396	0	0	0	396	0	0	0	0
Department of Defense, research ²	1,057	96	0	0	961	0	0	0	0
Department of Defense, total development ^{3 4}	832	301	113	0	418	0	0	0	0
Department of Energy	4,649	0	50	0	2,080	0	2,469	0	50
Department of Health & Human Svcs	1,162	0	99	0	1,037	0	0	0	26
Department of the Interior	3,913	3,768	0	0	145	0	0	0	0
Department of Transportation	359	0	0	0	100	0	0	0	259
Environmental Protection Agency	602	0	0	0	602	0	0	0	0
National Aeronautics and Space Admin ..	616	0	125	0	491	0	0	0	0
National Science Foundation	7,539	0	288	0	7,251	0	0	0	0
Outlying areas, total ⁵	93,259	18,464	3,136	0	58,390	8,244	10	0	5,015
Department of Agriculture	13,105	5,025	29	0	8,026	0	10	0	15
Department of Commerce	970	607	0	0	363	0	0	0	0
Department of Defense, research ²	2,277	1	17	0	2,259	0	0	0	0
Department of Defense, total development ^{3 4}	8,110	5,063	3,047	0	0	0	0	0	0
Department of Energy	784	0	0	0	784	0	0	0	0
Department of Health & Human Svcs	25,850	858	0	0	24,373	0	0	0	619
Department of the Interior	25,853	6,910	11	0	14,748	0	0	0	4,184
Department of Transportation	197	0	0	0	0	0	0	0	197
Environmental Protection Agency	85	0	0	0	85	0	0	0	0
National Aeronautics and Space Admin ..	1,742	0	0	0	1,742	0	0	0	0
National Science Foundation	14,286	0	32	0	6,010	8,244	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-85. Federal obligations for research and development, by State, selected agency, and performer: fiscal year 1997

[Dollars in thousands]

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State and agency	Total	Intra- mural ¹	Extramural						
			Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Puerto Rico, total ⁵	58,943	11,011	59	0	38,803	8,244	10	0	816
Department of Agriculture	9,307	5,025	10	0	4,262	0	10	0	0
Department of Commerce	363	0	0	0	363	0	0	0	0
Department of Defense, research ²	2,023	1	17	0	2,005	0	0	0	0
Department of Energy	784	0	0	0	784	0	0	0	0
Department of Health & Human Svcs	25,181	858	0	0	23,704	0	0	0	619
Department of the Interior	5,178	5,127	0	0	51	0	0	0	0
Department of Transportation	197	0	0	0	0	0	0	0	197
Environmental Protection Agency	85	0	0	0	85	0	0	0	0
National Aeronautics and Space Admin ..	1,742	0	0	0	1,742	0	0	0	0
National Science Foundation	14,083	0	32	0	5,807	8,244	0	0	0
Other areas, total ⁵	34,316	7,453	3,077	0	19,587	0	0	0	4,199
Department of Agriculture	3,798	0	19	0	3,764	0	0	0	15
Department of Commerce	607	607	0	0	0	0	0	0	0
Department of Defense, research ²	254	0	0	0	254	0	0	0	0
Department of Defense, total development ^{3 4}	8,110	5,063	3,047	0	0	0	0	0	0
Department of Health & Human Svcs	669	0	0	0	669	0	0	0	0
Department of the Interior	20,675	1,783	11	0	14,697	0	0	0	4,184
National Science Foundation	203	0	0	0	203	0	0	0	0
Offices abroad, total	54,616	18,992	34,237	0	65	0	1,322	0	0
Department of Agriculture	3,220	3,220	0	0	0	0	0	0	0
Department of Commerce	256	191	0	0	65	0	0	0	0
Department of Defense, research ²	11,074	885	8,867	0	0	0	1,322	0	0
Department of Defense, total development ^{3 4}	39,735	14,396	25,339	0	0	0	0	0	0
Department of Transportation	331	300	31	0	0	0	0	0	0

¹ Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

³ Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems. Geographic data for these categories are not reported; therefore, this table shows only total development.

⁴ Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

⁵ Outlying areas, total represents the sum of Puerto Rico, total and Other areas, total.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in fiscal year 1997.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-86. Federal obligations for R&D plant for selected agencies, by State
and category of performer supported:
fiscal year 1997**

[Dollars in thousands]

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State	Total	Intra- mural ¹	Extramural						State and local govts
			Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	
Total	1,879,225	572,997	389,696	60,536	238,549	548,753	16,737	51,957	0
Alabama	43,390	1,232	36,822	0	5,336	0	0	0	0
Alaska	3,000	3,000	0	0	0	0	0	0	0
Arizona	1,864	916	0	0	731	217	0	0	0
Arkansas	14,133	13,215	0	0	918	0	0	0	0
California	407,030	13,796	71,987	0	68,927	251,986	334	0	0
Colorado	52,628	6,942	23,091	0	4,269	14,598	0	3,728	0
Connecticut	5,205	50	1,857	0	2,730	0	568	0	0
Delaware	2,417	39	0	0	1,078	0	1,300	0	0
District of Columbia	7,047	3,286	957	0	836	0	1,968	0	0
Florida	66,079	30,126	33,043	0	2,910	0	0	0	0
Georgia	5,196	1,490	0	0	3,706	0	0	0	0
Hawaii	3,046	2,351	0	0	695	0	0	0	0
Idaho	26,247	21,256	0	305	4,686	0	0	0	0
Illinois	134,299	9,899	2	0	18,068	106,330	0	0	0
Indiana	7,897	121	4,654	0	3,122	0	0	0	0
Iowa	8,853	3,340	0	0	1,007	4,506	0	0	0
Kansas	1,371	410	0	0	961	0	0	0	0
Kentucky	430	0	0	0	430	0	0	0	0
Louisiana	18,604	2,373	13,470	0	2,761	0	0	0	0
Maine	335	0	0	0	335	0	0	0	0
Maryland	299,574	263,372	30,570	0	5,632	0	0	0	0
Massachusetts	12,083	1,160	352	0	9,767	0	804	0	0
Michigan	4,976	127	97	0	4,752	0	0	0	0
Minnesota	2,642	855	93	0	1,694	0	0	0	0
Mississippi	38,831	11,156	27,005	0	670	0	0	0	0
Missouri	5,670	94	43	0	5,533	0	0	0	0
Montana	9,591	9,191	0	0	400	0	0	0	0
Nebraska	807	807	0	0	0	0	0	0	0
Nevada	1,000	0	1,000	0	0	0	0	0	0
New Hampshire	2,307	2,307	0	0	0	0	0	0	0
New Jersey	29,912	17,359	2,097	0	4,220	4,390	1,846	0	0
New Mexico	124,836	11,161	10,750	41,960	6,753	54,010	202	0	0
New York	152,174	29,363	59	0	16,794	104,491	1,467	0	0
North Carolina	27,421	86	25,000	0	2,335	0	0	0	0
North Dakota	3,732	3,594	0	0	138	0	0	0	0
Ohio	49,742	14,881	31,280	0	3,581	0	0	0	0
Oklahoma	6,659	5,462	197	0	1,000	0	0	0	0
Oregon	5,943	360	0	0	5,583	0	0	0	0
Pennsylvania	40,752	27,880	893	0	4,936	0	7,043	0	0
Rhode Island	4,643	3,500	0	0	1,143	0	0	0	0
South Carolina	10,266	5,160	0	0	5,106	0	0	0	0
South Dakota	366	77	0	0	289	0	0	0	0
Tennessee	38,729	12,785	451	18,271	6,315	907	0	0	0
Texas	62,764	22,808	29,378	0	10,578	0	0	0	0
Utah	2,818	956	0	0	1,862	0	0	0	0
Vermont	459	0	0	0	459	0	0	0	0
Virginia	56,642	9,506	39,160	0	658	7,318	0	0	0
Washington	64,778	2,559	105	0	12,800	0	1,085	48,229	0
West Virginia	2,843	1,380	1,343	0	0	0	120	0	0
Wisconsin	1,977	438	0	0	1,539	0	0	0	0
Wyoming	596	242	0	0	354	0	0	0	0
Outlying areas	4,310	218	3,940	0	152	0	0	0	0
Puerto Rico	370	218	0	0	152	0	0	0	0
Other areas	3,940	0	3,940	0	0	0	0	0	0
Offices abroad	311	311	0	0	0	0	0	0	0

¹ Federal installations

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-87. Federal obligations for R&D plant, by State and selected agency:
fiscal year 1997**

[Dollars in thousands]

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State	Total	Dept of Agriculture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	Dept of the Interior	Dept of Transportation	EPA	NASA	National Science Foundation
Total	1,879,225	184,160	43,353	85,494	729,306	260,069	7,186	19,036	25,000	321,900	203,721
Alabama	43,390	4,153	0	0	0	950	0	0	0	37,917	370
Alaska	3,000	0	3,000	0	0	0	0	0	0	0	0
Arizona	1,864	419	0	497	0	0	0	0	0	0	948
Arkansas	14,133	1,408	0	0	0	12,725	0	0	0	0	0
California	407,030	11,989	0	3,362	255,403	1,081	0	0	0	64,073	71,122
Colorado	52,628	1,437	6,572	0	4,236	975	0	0	0	0	39,408
Connecticut	5,205	1,940	0	50	350	0	0	913	0	1,857	95
Delaware	2,417	39	0	0	0	0	0	0	0	0	2,378
District of Columbia	7,047	3,189	0	0	340	567	0	0	0	861	2,090
Florida	66,079	29,566	0	10	255	1,500	0	0	0	33,593	1,155
Georgia	5,196	1,040	0	0	0	1,556	0	0	0	450	2,150
Hawaii	3,046	351	2,000	0	0	0	0	0	0	0	695
Idaho	26,247	5,872	0	7,150	13,205	0	0	0	0	0	20
Illinois	134,299	16,167	0	100	106,445	1,000	0	0	0	2	10,585
Indiana	7,897	121	0	0	708	0	0	0	0	4,654	2,414
Iowa	8,853	3,340	0	0	4,685	0	0	0	0	0	828
Kansas	1,371	410	0	0	412	0	0	0	0	0	549
Kentucky	430	0	0	0	0	0	0	0	0	0	430
Louisiana	18,604	1,673	0	0	0	700	0	0	0	13,470	2,761
Maine	335	0	0	0	0	0	0	0	0	0	335
Maryland	299,574	19,218	19,406	13,218	48	214,764	0	0	0	29,555	3,365
Massachusetts	12,083	560	0	600	4,972	808	0	0	0	352	4,791
Michigan	4,976	127	0	0	269	1,250	0	0	0	97	3,233
Minnesota	2,642	855	0	0	0	0	0	0	0	93	1,694
Mississippi	38,831	1,662	0	7,960	0	551	0	0	0	28,539	119
Missouri	5,670	3,160	0	0	28	950	0	0	0	43	1,489
Montana	9,591	295	0	0	0	8,896	0	0	0	0	400
Nebraska	807	807	0	0	0	0	0	0	0	0	0
Nevada	1,000	0	0	0	1,000	0	0	0	0	0	0
New Hampshire	2,307	150	2,125	0	0	0	0	0	0	32	0
New Jersey	29,912	970	0	0	5,042	3,104	2,202	17,200	0	54	1,340
New Mexico	124,836	5,019	0	11,770	95,970	750	0	0	0	10,015	1,312
New York	152,174	4,358	0	0	130,170	950	0	0	0	89	16,607
North Carolina	27,421	1,056	0	0	200	0	0	0	25,000	0	1,165
North Dakota	3,732	3,594	0	0	0	0	0	0	0	0	138
Ohio	49,742	2,644	0	14,837	19	900	0	0	0	30,919	423
Oklahoma	6,659	5,262	0	0	397	0	0	0	0	0	1,000
Oregon	5,943	5,210	0	0	9	0	0	0	0	0	724
Pennsylvania	40,752	1,640	0	0	26,852	460	0	0	0	1,176	10,624
Rhode Island	4,643	0	3,500	0	0	0	0	0	0	0	1,143
South Carolina	10,266	2,779	5,000	0	0	0	0	0	0	0	2,487
South Dakota	366	77	0	0	0	0	0	0	0	0	289
Tennessee	38,729	5,175	0	12,785	19,548	0	0	0	0	451	770
Texas	62,764	25,891	0	290	229	2,432	19	0	0	30,359	3,544
Utah	2,818	500	0	456	0	0	0	0	0	0	1,862
Vermont	459	0	0	0	0	0	0	0	0	0	459
Virginia	56,642	0	0	8,158	7,318	0	4,965	923	0	33,144	2,134
Washington	64,778	8,159	1,750	0	49,322	2,200	0	0	0	105	3,242
West Virginia	2,843	980	0	0	1,743	0	0	0	0	0	120
Wisconsin	1,977	438	0	0	131	1,000	0	0	0	0	408
Wyoming	596	242	0	0	0	0	0	0	0	0	354
Outlying areas	4,310	218	0	3,940	0	0	0	0	0	0	152
Puerto Rico	370	218	0	0	0	0	0	0	0	0	152
Other areas	3,940	0	0	3,940	0	0	0	0	0	0	0
Offices abroad	311	0	0	311	0	0	0	0	0	0	0

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Interior, Transportation, and Health and Human Services; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1997.

KEY: EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

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Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	16,719,958	7,297,815	44	17,097,618	7,533,041	44	17,463,251	7,630,287	44
Departments:									
Department of Agriculture, total	915,982	566,598	62	954,857	586,181	61	994,863	612,870	62
Agricultural Marketing Service	4,605	1,635	36	4,696	1,675	36	4,791	1,720	36
Agricultural Research Service	648,685	365,210	56	676,216	383,009	57	716,316	403,787	56
Animal & Plant Hlth Inspection Svc	18,419	13,077	71	18,538	13,162	71	17,986	12,770	71
Cooperative State Research, Education, & Extension Service	22,037	22,037	100	23,362	23,362	100	23,047	23,047	100
Economic Research Service	51,669	37,687	73	53,136	38,066	72	53,619	38,380	72
Food Safety Inspection Service	15	12	80	15	12	80	15	12	80
Foreign Agricultural Service	898	898	100	898	898	100	898	898	100
Forest Service	162,552	120,160	74	170,752	120,000	70	170,752	126,000	74
Grain Inspection Packers & Stockyards Administration	2,752	2,202	80	2,752	2,202	80	2,819	2,255	80
Nat'l Agricultural Statistics Svc	3,182	2,512	79	3,276	2,579	79	3,220	2,601	81
Rural Business-Cooperative Svc	1,168	1,168	100	1,216	1,216	100	1,400	1,400	100
Department of Commerce, total	664,177	416,410	63	695,127	447,735	64	694,712	436,538	63
Bureau of the Census	5,120	3,250	63	5,482	3,467	63	9,149	5,790	63
Economic Development Admin	50	50	100	50	50	100	50	50	100
Nat'l Inst of Standards & Tech	222,139	140,975	63	221,968	150,536	68	233,591	158,882	68
Nat'l Oceanic & Atmospheric Admin	429,976	265,243	62	459,035	285,090	62	445,170	265,064	60
National Telecommunications & Information Administration	6,892	6,892	100	8,592	8,592	100	6,752	6,752	100
Department of Defense, total	8,156,257	2,836,980	35	7,750,603	2,799,064	36	7,827,854	2,802,141	36
Department of the Army	2,291,370	833,833	36	2,080,181	825,137	40	1,985,718	840,938	42
Department of the Navy	2,976,880	1,272,331	43	2,917,387	1,254,860	43	3,024,756	1,294,739	43
Department of the Air Force	1,079,679	311,332	29	822,394	291,182	35	1,030,894	298,135	29
Defense Agencies, total	1,551,633	416,654	27	1,711,893	425,321	25	1,555,359	365,615	24
Ballistic Missile Defense Org	509,975	94,346	19	723,408	94,702	13	696,054	98,373	14
Defense Adv Rsch Projects Agcy	352,340	255,182	72	316,784	227,493	72	206,121	145,384	71
Defense Info Systems Agcy	18,661	10,253	55	17,442	11,721	67	48,676	36,134	74
Defense Logistics Agency	22,738	2,382	10	34,871	2,307	7	32,253	202	1
Defense Special Weapons Agcy	50,852	1,165	2	48,042	1,191	2	56,572	1,205	2
Joint Staff	38,520	1	*	53,976	1	*	69,495	1	*
Special Operations Command	41,268	4,181	10	46,446	4,749	10	45,717	9,699	21
Washington Headquarters Services	517,279	49,144	10	470,924	83,157	18	400,471	74,617	19
Operational Test & Evaluation, Director	4,023	303	8	3,834	415	11	2,634	430	16
Test & Evaluation, Deputy Under Secretary of Defense	252,672	2,527	1	214,914	2,149	1	228,493	2,284	1
Department of Education	9,218	6,406	69	9,845	6,779	69	10,319	7,022	68
Department of Energy	425,410	102,400	24	535,055	105,839	20	755,513	108,306	14
Dept of Health & Human Svcs, total	2,672,948	1,199,151	45	2,957,220	1,288,253	44	3,079,853	1,371,029	45
Administration on Aging	426	288	68	426	288	68	426	288	68
Admin for Children & Families	1,251	403	32	783	483	62	803	803	100
Agcy for Hlth Care Policy & Rsch	44,911	20,404	45	49,968	22,300	45	53,478	23,200	43
Centers for Disease Control & Prevention	236,970	201,425	85	272,437	231,572	85	279,226	237,343	85
Food & Drug Administration	138,509	124,658	90	138,890	125,001	90	147,896	133,106	90
Health Care Financing Admin	64	10	16	50	10	20	50	10	20
Health Resources & Services Admin	2,614	2,496	95	2,697	2,576	96	2,838	2,713	96
National Institutes of Health	2,234,136	847,356	38	2,487,372	904,026	36	2,590,527	971,507	38
Office of the Secretary, total	14,066	2,110	15	4,596	1,996	43	4,608	2,058	45
Office of the Asst Secretary, Planning & Evaluation	13,707	1,751	13	4,300	1,700	40	4,300	1,750	41
Office of Public Hlth & Science	359	359	100	296	296	100	308	308	100
Substance Abuse & Mental Health Services Administration	1	1	100	1	1	100	1	1	100

See explanatory information, if any, and SOURCE at end of table.

Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

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Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Dept of Housing & Urban Development ...	21,243	16,400	77	24,985	19,500	78	31,820	25,200	79
Department of the Interior, total	518,592	275,340	53	541,877	289,683	53	564,695	290,490	51
Bureau of Reclamation	5,951	2,975	50	7,835	3,927	50	9,200	3,952	43
Geological Survey	492,062	255,872	52	507,123	263,704	52	527,881	263,941	50
Minerals Management Service	6,306	4,219	67	6,773	4,656	69	7,003	4,803	69
National Park Service	14,273	12,274	86	20,146	17,396	86	20,611	17,794	86
Department of Justice, total	41,566	6,871	17	42,220	7,115	17	45,017	7,162	16
Bureau of Prisons	2,400	2,000	83	2,400	2,000	83	2,400	2,000	83
Drug Enforcement Administration ¹	13	3	23	1	1	100	1	1	100
Federal Bureau of Investigation	35,458	4,428	12	35,729	4,474	13	35,776	4,521	13
Immigration & Naturalization Service ²	40	40	100	40	40	100	40	40	100
Office of Justice Programs	3,655	400	11	4,050	600	15	6,800	600	9
Department of Labor, total	13,186	6,278	48	16,757	6,399	38	17,562	6,532	37
Bureau of Labor Statistics	8,600	2,203	26	12,400	2,181	18	12,400	2,181	18
Employment & Training Admin	1,884	1,373	73	1,544	1,405	91	2,256	1,445	64
Occupational Safety & Hlth Admin	1,567	1,567	100	1,615	1,615	100	1,663	1,663	100
Office of the Secretary	50	50	100	50	50	100	50	50	100
Pension Benefit Guaranty Corp	242	242	100	251	251	100	270	270	100
Pension & Welfare Benefits Admin	843	843	100	897	897	100	923	923	100
Department of State	313	313	100	313	313	100	313	313	100
Department of Transportation, total	192,017	94,861	49	265,823	95,054	36	288,453	105,764	37
Coast Guard	16,282	7,000	43	15,977	7,200	45	13,484	5,470	41
Federal Aviation Administration	90,759	62,268	69	93,601	60,868	65	88,700	66,700	75
Federal Highway Administration	40,873	10,259	25	107,284	10,882	10	127,240	11,744	9
Federal Railroad Administration	10,409	1,723	17	10,131	1,725	17	11,234	1,935	17
Federal Transit Administration	2,266	2,266	100	2,303	2,303	100	2,385	2,385	100
National Highway Traffic Safety Administration	23,373	7,713	33	27,316	9,014	33	38,417	14,598	38
Office of the Secretary	3,526	1,929	55	4,100	1,332	32	3,540	1,145	32
Research & Special Programs Admin ..	4,529	1,703	38	5,111	1,730	34	3,453	1,787	52
Department of the Treasury, total	38,653	35,918	93	45,255	40,520	90	46,114	41,366	90
Bureau of Engraving & Printing	1,606	261	16	1,800	190	11	1,793	187	10
Internal Revenue Service	33,263	32,061	96	39,561	36,647	93	40,223	37,309	93
Office of Thrift Supervision	638	450	71	720	509	71	788	560	71
United States Customs Service ³	2,850	2,850	100	2,860	2,860	100	2,860	2,860	100
United States Mint	1	1	100	37	37	100	14	14	100
United States Secret Service	295	295	100	277	277	100	436	436	100
Department of Veterans Affairs	252,699	166,783	66	299,288	197,531	66	299,989	198,094	66
Other agencies:									
Appalachian Regional Commission	100	100	100	50	50	100	50	50	100
Consumer Product Safety Commission ...	60	10	17	206	6	3	236	6	3
Environmental Protection Agency	257,348	257,348	100	289,337	289,337	100	291,246	291,246	100
Federal Communications Commission	3,099	3,099	100	3,462	3,462	100	3,270	3,270	100
Federal Trade Commission	696	515	74	1,287	968	75	1,131	846	75
International Development Cooperation Agency, total	22,506	17,627	78	20,976	15,652	75	21,044	15,708	75
Agency for International Development ⁴	22,506	17,627	78	20,976	15,652	75	21,044	15,708	75
Library of Congress	2,772	2,541	92	2,539	2,521	99	2,697	2,624	97
National Aeronautics & Space Admin	2,331,826	1,162,970	50	2,462,677	1,208,951	49	2,300,277	1,175,066	51
National Archives & Records Admin	120	120	100	120	120	100	120	120	100
National Science Foundation	13,688	9,582	70	14,389	10,072	70	16,223	11,356	70
Nuclear Regulatory Commission	15,238	12,533	82	13,991	11,679	83	15,152	13,322	88
Smithsonian Institution	130,000	84,500	65	134,000	87,100	65	142,000	92,300	65
Social Security Administration	4,974	4,974	100	6,258	6,258	100	6,383	6,383	100
Tennessee Valley Authority ⁵	8,916	6,272	70	2,876	1,985	69	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

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Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per-cent of total	1998			1999		
				Total	Personnel costs	Per-cent of total	Total	Personnel costs	Per-cent of total
US Arms Control & Disarmament Agency	525	200	38	280	135	48	280	135	48
United States Information Agency	152	5	3	150	5	3	0	0	0
US International Trade Commission	5,677	4,710	83	5,795	4,774	82	6,065	5,028	83

- ¹ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Increases in personnel costs are due to more complete reporting according to the National Science Foundation's definition of R&D, and not to actual increases in personnel costs.

Because of rounding, detail may not add to totals.

KEY: * = Percentage less than .05%

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-89. Federal obligations for total basic research to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 1 of 2

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	2,688,570	1,284,626	48	2,872,166	1,341,596	47	3,063,668	1,403,777	46
Departments:									
Department of Agriculture, total	383,519	227,770	59	395,009	235,293	60	414,771	246,537	59
Agricultural Research Service	343,803	193,561	56	351,633	199,165	57	372,484	209,969	56
Cooperative State Research, Education, & Extension Service	9,587	9,587	100	10,217	10,217	100	10,714	10,714	100
Economic Research Service	5,300	3,866	73	7,160	5,129	72	5,584	4,097	73
Foreign Agricultural Service	680	680	100	680	680	100	680	680	100
Forest Service	23,039	19,200	83	24,174	19,200	79	24,174	20,160	83
Nat'l Agricultural Statistics Svc	1,110	876	79	1,145	902	79	1,135	917	81
Department of Commerce, total	35,009	24,441	70	36,549	25,991	71	38,615	27,904	72
Bureau of the Census	1,061	649	61	1,131	692	61	1,889	1,156	61
Nat'l Inst of Standards & Tech	33,948	23,792	70	35,418	25,299	71	36,726	26,748	73
Department of Defense, total	313,723	116,296	37	313,301	112,201	36	346,666	116,146	34
Department of the Army	83,179	41,981	50	87,800	44,102	50	93,895	42,598	45
Department of the Navy	122,916	53,985	44	113,787	49,975	44	127,870	56,161	44
Department of the Air Force	97,079	16,285	17	70,407	11,961	17	91,014	12,361	14
Defense Agencies, total	10,549	4,045	38	41,307	6,163	15	33,887	5,026	15
Ballistic Missile Defense Org	2,523	95	4	33,628	650	2	20,903	550	3
Defense Adv Rsch Projects Agcy	3,540	2,655	75	5,560	4,170	75	2,280	1,710	75
Washington Headquarters Services	4,486	1,295	29	2,119	1,343	63	10,704	2,766	26
Department of Education	143	100	70	153	105	69	237	161	68
Department of Energy	44,679	9,152	20	58,460	11,710	20	99,027	11,132	11
Dept of Health & Human Svcs, total	1,134,430	485,741	43	1,218,706	516,382	42	1,320,691	554,909	42
Health Resources & Services Admin ..	1,053	1,053	100	1,087	1,087	100	1,150	1,150	100
National Institutes of Health	1,133,377	484,688	43	1,217,619	515,295	42	1,319,541	553,759	42
Department of the Interior, total	52,428	27,245	52	52,922	27,514	52	62,022	31,006	50
Geological Survey	52,312	27,202	52	52,882	27,499	52	61,982	30,991	50
National Park Service	116	43	37	40	15	38	40	15	38
Department of Justice, total	150	116	77	1,000	200	20	3,000	200	7
Office of Justice Programs	150	116	77	1,000	200	20	3,000	200	7
Department of Labor, total	7,300	1,243	17	11,100	1,221	11	11,100	1,221	11
Bureau of Labor Statistics	7,300	1,243	17	11,100	1,221	11	11,100	1,221	11
Department of Transportation, total	9,577	1,539	16	33,842	1,632	5	35,013	1,762	5
Federal Highway Administration	9,577	1,539	16	33,842	1,632	5	35,013	1,762	5
Department of the Treasury, total	31	20	65	23	3	13	24	3	13
Bureau of Engraving & Printing	31	20	65	23	3	13	24	3	13
Department of Veterans Affairs	13,575	8,961	66	14,100	9,307	66	15,500	10,331	67

See explanatory information, if any, and SOURCE at end of table.

Table C-89. Federal obligations for total basic research to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

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Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per-cent of total	1998			1999		
				Total	Personnel costs	Per-cent of total	Total	Personnel costs	Per-cent of total
Other agencies:									
Environmental Protection Agency	26,738	26,738	100	27,215	27,215	100	27,215	27,215	100
International Development Cooperation Agency, total	15	11	73	166	114	69	135	93	69
Agency for International Development ¹	15	11	73	166	114	69	135	93	69
Library of Congress	259	254	98	209	208	100	214	214	100
National Aeronautics & Space Admin	523,692	261,185	50	561,407	275,600	49	531,642	271,582	51
National Science Foundation	13,302	9,314	70	14,004	9,800	70	15,796	11,061	70
Smithsonian Institution	130,000	84,500	65	134,000	87,100	65	142,000	92,300	65

¹ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Increases in personnel costs are due to more complete reporting according to the National Science Foundation's definition of R&D, and not to actual increases in personnel costs.

Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 1 of 3

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	4,978,650	2,864,273	58	5,378,401	3,034,843	56	5,547,246	3,063,927	55
Departments:									
Department of Agriculture, total	438,885	281,136	64	462,125	291,665	63	479,240	305,103	64
Agricultural Marketing Service	3,990	1,423	36	4,098	1,458	36	4,176	1,497	36
Agricultural Research Service	246,500	138,780	56	263,725	149,374	57	279,363	157,477	56
Cooperative State Research, Education, & Extension Service	12,450	12,450	100	13,145	13,145	100	12,333	12,333	100
Economic Research Service	46,369	33,821	73	45,976	32,937	72	48,035	34,283	71
Foreign Agricultural Service	218	218	100	218	218	100	218	218	100
Forest Service	125,568	91,200	73	131,066	91,200	70	131,066	95,760	73
Grain Inspection Packers & Stockyards Administration	550	440	80	550	440	80	564	451	80
Nat'l Agricultural Statistics Svc	2,072	1,636	79	2,131	1,677	79	2,085	1,684	81
Rural Business-Cooperative Svc	1,168	1,168	100	1,216	1,216	100	1,400	1,400	100
Department of Commerce, total	568,526	349,632	61	606,387	381,299	63	607,644	377,517	62
Bureau of the Census	2,352	1,640	70	2,509	1,749	70	4,183	2,921	70
Economic Development Admin	50	50	100	50	50	100	50	50	100
Nat'l Inst of Standards & Tech	171,086	105,274	62	169,884	112,259	66	179,317	118,550	66
Nat'l Oceanic & Atmospheric Admin	391,197	238,827	61	430,280	263,577	61	420,342	252,244	60
National Telecommunications & Information Administration	3,841	3,841	100	3,664	3,664	100	3,752	3,752	100
Department of Defense, total	1,065,041	642,374	60	1,042,403	600,597	58	1,020,311	592,773	58
Department of the Army	329,510	276,996	84	349,061	226,964	65	320,639	235,301	73
Department of the Navy	247,664	143,571	58	233,578	135,405	58	239,780	139,000	58
Department of the Air Force	352,825	179,549	51	315,887	184,549	58	324,966	179,891	55
Defense Agencies, total	135,042	42,258	31	143,877	53,679	37	134,926	38,581	29
Ballistic Missile Defense Org	13,995	2,413	17	14,925	2,559	17	14,017	1,329	9
Defense Adv Rsch Projects Agcy	48,649	36,261	75	63,023	47,267	75	44,370	33,277	75
Defense Info Systems Agcy	1,871	1	*	1,630	1	*	1,910	1	*
Defense Logistics Agency	7,041	1	*	8,016	1	*	8,248	1	*
Defense Special Weapons Agcy	43,551	435	1	40,142	401	1	49,454	494	1
Special Operations Command	5,030	141	3	5,984	299	5	5,486	274	5
Washington Headquarters Services	14,905	3,006	20	10,157	3,151	31	11,441	3,205	28
Department of Education	6,666	4,633	70	7,127	4,908	69	7,773	5,290	68
Department of Energy	123,398	8,496	7	170,352	20,811	12	291,974	22,089	8
Dept of Health & Human Svcs, total	1,171,569	599,536	51	1,257,354	644,169	51	1,327,874	677,514	51
Administration on Aging	85	57	67	85	57	67	85	57	67
Admin for Children & Families	1,251	403	32	783	483	62	803	803	100
Agcy for Hlth Care Policy & Rsch	35,005	10,498	30	40,317	12,649	31	41,708	11,430	27
Centers for Disease Control & Prevention	236,970	201,425	85	272,437	231,572	85	279,226	237,343	85
Food & Drug Administration	138,509	124,658	90	138,890	125,001	90	147,896	133,106	90
Health Care Financing Admin	64	10	16	50	10	20	50	10	20
Health Resources & Services Admin	1,561	1,443	92	1,610	1,489	92	1,688	1,563	93
National Institutes of Health	744,417	259,291	35	798,882	271,208	34	852,118	291,452	34
Office of the Secretary, total	13,707	1,751	13	4,300	1,700	40	4,300	1,750	41
Office of the Asst Secretary, Planning & Evaluation	13,707	1,751	13	4,300	1,700	40	4,300	1,750	41

See explanatory information, if any, and SOURCE at end of table.

Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 2 of 3

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Dept of Housing & Urban Development ...	5,576	4,400	79	6,990	5,500	79	9,008	7,200	80
Department of the Interior, total	441,220	235,583	53	463,007	249,273	54	475,587	246,654	52
Bureau of Reclamation	4,251	2,550	60	5,626	3,375	60	6,650	3,390	51
Geological Survey	416,506	216,583	52	430,502	223,861	52	441,363	220,682	50
Minerals Management Service	6,306	4,219	67	6,773	4,656	69	7,003	4,803	69
National Park Service	14,157	12,231	86	20,106	17,381	86	20,571	17,779	86
Department of Justice, total	4,396	1,821	41	3,840	1,840	48	5,240	1,840	35
Bureau of Prisons	1,900	1,600	84	1,900	1,600	84	1,900	1,600	84
Drug Enforcement Administration ¹	1	1	100	0	0	0	0	0	0
Immigration & Naturalization Service ²	40	40	100	40	40	100	40	40	100
Office of Justice Programs	2,455	180	7	1,900	200	11	3,300	200	6
Department of Labor, total	4,594	3,743	81	4,286	3,853	90	4,328	3,938	91
Bureau of Labor Statistics	1,300	960	74	1,300	960	74	1,300	960	74
Employment & Training Admin	805	294	37	394	301	76	360	310	86
Occupational Safety & Hlth Admin	1,567	1,567	100	1,615	1,615	100	1,663	1,663	100
Office of the Secretary	25	25	100	25	25	100	25	25	100
Pension Benefit Guaranty Corp	54	54	100	55	55	100	57	57	100
Pension & Welfare Benefits Admin	843	843	100	897	897	100	923	923	100
Department of State	313	313	100	313	313	100	313	313	100
Department of Transportation, total	132,334	65,133	49	166,502	61,235	37	197,703	74,870	38
Coast Guard	3,908	2,100	54	3,835	2,160	56	3,237	1,960	61
Federal Aviation Administration	63,757	45,860	72	51,481	40,191	78	62,090	46,882	76
Federal Highway Administration	27,016	5,642	21	69,355	5,985	9	78,907	6,459	8
Federal Railroad Administration	10,059	1,643	16	9,781	1,645	17	10,884	1,855	17
Federal Transit Administration	909	909	100	946	946	100	1,895	1,895	100
National Highway Traffic Safety Administration	23,373	7,713	33	27,316	9,014	33	38,417	14,598	38
Research & Special Programs Admin ..	3,312	1,266	38	3,788	1,294	34	2,273	1,221	54
Department of the Treasury, total	33,738	31,167	92	40,410	35,928	89	41,252	36,763	89
Bureau of Engraving & Printing	1,476	170	12	1,688	181	11	1,675	178	11
Internal Revenue Service	31,279	30,202	97	37,665	34,901	93	38,293	35,529	93
Office of Thrift Supervision	638	450	71	720	509	71	788	560	71
United States Customs Service ³	50	50	100	60	60	100	60	60	100
United States Secret Service	295	295	100	277	277	100	436	436	100
Department of Veterans Affairs	217,406	143,488	66	262,509	173,256	66	259,672	171,384	66
Other agencies:									
Appalachian Regional Commission	100	100	100	50	50	100	50	50	100
Consumer Product Safety Commission ...	60	10	17	206	6	3	236	6	3
Environmental Protection Agency	187,162	187,162	100	214,854	214,854	100	216,286	216,286	100
Federal Communications Commission	3,099	3,099	100	3,462	3,462	100	3,270	3,270	100
Federal Trade Commission	696	515	74	1,287	968	75	1,131	846	75
International Development Cooperation									
Agency, total	19,745	15,099	76	15,961	11,901	75	15,204	11,336	75
Agency for International Development ⁴	19,745	15,099	76	15,961	11,901	75	15,204	11,336	75
Library of Congress	537	534	99	462	462	100	483	476	99
National Aeronautics & Space Admin	522,530	260,606	50	620,899	304,805	49	554,240	283,126	51
National Archives & Records Admin	120	120	100	120	120	100	120	120	100
National Science Foundation	386	268	69	385	272	71	427	295	69
Nuclear Regulatory Commission	15,238	12,533	82	13,991	11,679	83	15,152	13,322	88
Social Security Administration	4,974	4,974	100	6,258	6,258	100	6,383	6,383	100
Tennessee Valley Authority ⁵	3,987	2,883	72	636	445	70	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

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Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per-cent of total	1998			1999		
				Total	Personnel costs	Per-cent of total	Total	Personnel costs	Per-cent of total
US Arms Control & Disarmament Agency	525	200	38	280	135	48	280	135	48
United States Information Agency	152	5	3	150	5	3	0	0	0
US International Trade Commission	5,677	4,710	83	5,795	4,774	82	6,065	5,028	83

- ¹ Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.
- ² Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.
- ³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.
- ⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.
- ⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Increases in personnel costs are due to more complete reporting according to the National Science Foundation's definition of R&D, and not to actual increases in personnel costs.

Because of rounding, detail may not add to totals.

KEY: * = Percentage less than .05%

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 1 of 3

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	9,052,738	3,148,916	35	8,847,051	3,156,602	36	8,852,337	3,162,583	36
Departments:									
Department of Agriculture, total	93,578	57,692	62	97,723	59,223	61	100,852	61,230	61
Agricultural Marketing Service	615	212	34	598	217	36	615	223	36
Agricultural Research Service	58,382	32,869	56	60,858	34,470	57	64,469	36,341	56
Animal & Plant Hlth Inspection Svc	18,419	13,077	71	18,538	13,162	71	17,986	12,770	71
Food Safety Inspection Service	15	12	80	15	12	80	15	12	80
Forest Service	13,945	9,760	70	15,512	9,600	62	15,512	10,080	65
Grain Inspection Packers & Stockyards Administration	2,202	1,762	80	2,202	1,762	80	2,255	1,804	80
Department of Commerce, total	60,642	42,337	70	52,191	40,445	77	48,453	31,117	64
Bureau of the Census	1,707	961	56	1,842	1,026	56	3,077	1,713	56
Nat'l Inst of Standards & Tech	17,105	11,909	70	16,666	12,978	78	17,548	13,584	77
Nat'l Oceanic & Atmospheric Admin	38,779	26,416	68	28,755	21,513	75	24,828	12,820	52
National Telecommunications & Information Administration	3,051	3,051	100	4,928	4,928	100	3,000	3,000	100
Department of Defense, total ¹	6,777,493	2,078,310	31	6,394,899	2,086,266	33	6,460,877	2,093,222	32
Department of the Army	1,878,681	514,856	27	1,643,320	554,071	34	1,571,184	563,039	36
Department of the Navy	2,606,300	1,074,775	41	2,570,022	1,069,480	42	2,657,106	1,099,578	41
Department of the Air Force	629,775	115,498	18	436,100	94,672	22	614,914	105,883	17
Defense Agencies, total	1,406,042	370,351	26	1,526,709	365,479	24	1,386,546	322,008	23
Ballistic Missile Defense Org	493,457	91,838	19	674,855	91,493	14	661,134	96,494	15
Defense Advanced Rsch Projects Agency	300,151	216,266	72	248,201	176,056	71	159,471	110,397	69
Defense Info Systems Agcy	16,790	10,252	61	15,812	11,720	74	46,766	36,133	77
Defense Logistics Agency	15,697	2,381	15	26,855	2,306	9	24,005	201	1
Defense Special Weapons Agcy	7,301	730	10	7,900	790	10	7,118	711	10
Joint Staff	38,520	1	*	53,976	1	*	69,495	1	*
Special Operations Command	36,238	4,040	11	40,462	4,450	11	40,231	9,425	23
Washington Headquarters Services	497,888	44,843	9	458,648	78,663	17	378,326	68,646	18
Operational Test & Evaluation, Director	4,023	303	8	3,834	415	11	2,634	430	16
Test & Evaluation, Deputy Under Secretary of Defense	252,672	2,527	1	214,914	2,149	1	228,493	2,284	1
Department of Defense, total advanced technology (at) ¹	1,023,538	388,678	38	1,048,381	347,378	33	795,724	268,793	34
Department of the Army (at)	218,638	50,298	23	228,640	54,059	24	156,504	57,066	36
Department of the Navy (at)	123,318	45,307	37	126,389	46,435	37	113,704	41,775	37
Department of the Air Force (at)	90,635	45,201	50	75,666	39,821	53	67,053	41,493	62
Defense Agencies, total (at)	590,947	247,872	42	617,686	207,063	34	458,463	128,459	28
Ballistic Missile Def Org (at)	127,959	16,783	13	172,599	15,604	9	142,651	12,055	8
Defense Advanced Rsch Projects Agency (at)	261,959	196,469	75	206,689	155,017	75	115,808	86,856	75
Defense Logistics Agency (at)	13,068	200	2	24,356	100	*	23,408	200	1
Def Special Weapons Agcy (at)	7,301	730	10	7,900	790	10	7,118	711	10
Joint Staff (at)	38,520	1	*	53,976	1	*	69,495	1	*
Special Operations Command (at) ... Washington Headquarters Services (at)	15,219	1,644	11	16,994	1,869	11	16,897	1,858	11
	126,921	32,045	25	135,172	33,682	25	83,086	26,778	32

See explanatory information, if any, and SOURCE at end of table.

Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 2 of 3

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Defense, total									
major systems (ms) ¹	5,753,955	1,689,632	29	5,346,518	1,738,888	33	5,665,153	1,824,429	32
Department of the Army (ms)	1,660,043	464,558	28	1,414,680	500,012	35	1,414,680	505,973	36
Department of the Navy (ms)	2,482,982	1,029,468	41	2,443,633	1,023,045	42	2,543,402	1,057,803	42
Department of the Air Force (ms)	539,140	70,297	13	360,434	54,851	15	547,861	64,390	12
Defense Agencies, total (ms)	815,095	122,479	15	909,023	158,416	17	928,083	193,549	21
Ballistic Missile Def Org (ms)	365,498	75,055	21	502,256	75,889	15	518,483	84,439	16
Defense Advanced Rsch Projects									
Agency (ms)	38,192	19,797	52	41,512	21,039	51	43,663	23,541	54
Defense Info Systems Agcy (ms)	16,790	10,252	61	15,812	11,720	74	46,766	36,133	77
Defense Logistics Agency (ms)	2,629	2,181	83	2,499	2,206	88	597	1	*
Special Operations									
Command (ms)	21,019	2,396	11	23,468	2,581	11	23,334	7,567	32
Washington Headquarters									
Services (ms)	370,967	12,798	3	323,476	44,981	14	295,240	41,868	14
Operational Test & Evaluation,									
Director (ms)	4,023	303	8	3,834	415	11	2,634	430	16
Test & Evaluation, Deputy Under									
Secretary of Defense (ms)	252,672	2,527	1	214,914	2,149	1	228,493	2,284	1
Department of Education	2,409	1,673	69	2,565	1,766	69	2,309	1,571	68
Department of Energy	257,333	84,752	33	306,243	73,318	24	364,512	75,085	21
Dept of Health & Human Svcs, total	366,949	113,874	31	481,160	127,702	27	431,288	138,606	32
Administration on Aging	341	231	68	341	231	68	341	231	68
Agcy for Hlth Care Policy & Rsch	9,906	9,906	100	9,651	9,651	100	11,770	11,770	100
National Institutes of Health	356,342	103,377	29	470,871	117,523	25	418,868	126,296	30
Office of the Secretary, total	359	359	100	296	296	100	308	308	100
Off of Public Hlth & Science	359	359	100	296	296	100	308	308	100
Substance Abuse & Mental Health									
Services Administration	1	1	100	1	1	100	1	1	100
Dept of Housing & Urban Development ...	15,667	12,000	77	17,995	14,000	78	22,812	18,000	79
Department of the Interior, total	24,944	12,512	50	25,948	12,896	50	27,086	12,830	47
Bureau of Reclamation	1,700	425	25	2,209	552	25	2,550	562	22
Geological Survey	23,244	12,087	52	23,739	12,344	52	24,536	12,268	50
Department of Justice, total	37,020	4,934	13	37,380	5,075	14	36,777	5,122	14
Bureau of Prisons	500	400	80	500	400	80	500	400	80
Drug Enforcement Administration ²	12	2	17	1	1	100	1	1	100
Federal Bureau of Investigation	35,458	4,428	12	35,729	4,474	13	35,776	4,521	13
Office of Justice Programs	1,050	104	10	1,150	200	17	500	200	40
Department of Labor, total	1,292	1,292	100	1,371	1,325	97	2,134	1,373	64
Employment & Training Admin	1,079	1,079	100	1,150	1,104	96	1,896	1,135	60
Office of the Secretary	25	25	100	25	25	100	25	25	100
Pension Benefit Guaranty Corp	188	188	100	196	196	100	213	213	100

See explanatory information, if any, and SOURCE at end of table.

Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1997, 1998, and 1999

[In thousands of dollars and percentages]

Page 3 of 3

Agency and subdivision	1997			Preliminary					
	Total	Personnel costs	Per- cent of total	1998			1999		
				Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Transportation, total	50,106	28,189	56	65,479	32,187	49	55,737	29,132	52
Coast Guard	12,374	4,900	40	12,142	5,040	42	10,247	3,510	34
Federal Aviation Administration	27,002	16,408	61	42,120	20,677	49	26,610	19,818	74
Federal Highway Administration	4,280	3,078	72	4,087	3,265	80	13,320	3,523	26
Federal Railroad Administration	350	80	23	350	80	23	350	80	23
Federal Transit Administration	1,357	1,357	100	1,357	1,357	100	490	490	100
Office of the Secretary	3,526	1,929	55	4,100	1,332	32	3,540	1,145	32
Research & Special Programs Admin ..	1,217	437	36	1,323	436	33	1,180	566	48
Department of the Treasury, total	4,884	4,731	97	4,822	4,589	95	4,838	4,600	95
Bureau of Engraving & Printing	99	71	72	89	6	7	94	6	6
Internal Revenue Service	1,984	1,859	94	1,896	1,746	92	1,930	1,780	92
United States Customs Service ³	2,800	2,800	100	2,800	2,800	100	2,800	2,800	100
United States Mint	1	1	100	37	37	100	14	14	100
Department of Veterans Affairs	21,718	14,334	66	22,679	14,968	66	24,817	16,379	66
Other agencies:									
Environmental Protection Agency	43,448	43,448	100	47,268	47,268	100	47,745	47,745	100
International Development Cooperation									
Agency, total	2,746	2,517	92	4,849	3,637	75	5,705	4,279	75
Agency for International									
Development ⁴	2,746	2,517	92	4,849	3,637	75	5,705	4,279	75
Library of Congress	1,976	1,753	89	1,868	1,851	99	2,000	1,934	97
National Aeronautics & Space Admin	1,285,604	641,179	50	1,280,371	628,546	49	1,214,395	620,358	51
Tennessee Valley Authority ⁵	4,929	3,389	69	2,240	1,540	69	0	0	0

¹ Not all Department of Defense (DoD) agencies with development obligations are able to categorize these obligations according to the advanced technology and major systems development breakdown. Therefore, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁵ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: * = Percentage less than .05%

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-92. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	25,127.9	27,041.0	30,635.8	34,065.9	35,766.8	37,959.4	41,330.1	45,860.3	52,090.3	53,214.2	56,556.6
Departments:											
Dept of Agriculture, total	572.4	630.5	687.6	782.5	828.4	858.8	893.5	923.2	953.0	994.0	1,049.7
Agricultural Cooperative Svc	NA	NA	1.6	1.3	1.7	2.1	2.2	2.9	2.6	2.8	2.7
Agricultural Marketing Svc .....	.0	.9	1.3	1.2	1.5	.6	1.7	1.3	1.7	1.4	1.6
Agricultural Research Svc	NA	NA	NA	425.9	436.1	469.4	479.3	492.9	500.5	526.5	540.4
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	6.2
Cooperative State Research, Ed. & Extension Service	NA	NA	NA	199.0	219.8	220.4	239.5	243.6	256.5	274.1	294.8
Economic Research Service	NA	NA	NA	38.0	37.0	36.8	40.9	45.1	46.0	43.2	47.2
Economics, Stat, & Coop Svc	32.4	35.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	31.1	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	86.7	105.7	100.6	101.8	116.0	111.1	109.2	113.8	113.5	120.7	138.0
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.9	1.0	1.2	1.0
Human Nutrition Info Svc	NA	NA	NA	.0	3.8	5.8	7.9	7.2	10.6	9.6	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	7.0	7.6	8.2	8.4	8.0	3.5	3.6
Office of International Cooperation & Development ...	NA	.0	6.4	6.9	4.6	4.1	3.6	5.8	7.5	5.1	5.0
Office of Transportation	NA	.5	.8	.9	.9	.8	1.0	1.3	1.0	1.0	1.1
Science & Ed Admin, total	453.3	487.8	545.8	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	318.4	331.2	371.6	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	134.9	156.6	174.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	272.7	307.1	360.6	346.8	286.5	335.2	336.3	377.8	380.1	311.1	389.4
Bureau of the Census	3.3	2.7	3.2	3.8	3.7	4.3	4.4	4.8	4.6	4.5	5.6
Economic Development Admin ...	25.1	26.7	35.5	35.5	12.1	5.3	5.1	7.8	7.8	7.2	2.7
Maritime Administration	18.8	18.7	24.1	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	59.0	64.8	77.1	84.4	87.6	94.0	103.3	106.5	109.2	102.1	111.4
National Oceanic & Atmospheric Administration	164.7	190.1	210.6	209.0	174.1	222.0	214.7	249.1	248.7	189.2	263.5
National Telecommunications & Information Administration	1.3	3.3	9.1	12.9	8.0	9.6	8.6	9.0	8.5	7.8	6.1
Office of the Secretary .....	.0	.3	.6	.1	.2	-	.1	.6	1.2	.3	.1
Patent & Trademark Office .....	.5	.5	.5	1.1	.7	.0	.0	.0	.0	.0	.0
Department of Defense, total	10,935.4	11,733.1	13,706.1	15,993.0	18,482.9	21,373.5	22,999.4	27,143.7	32,491.1	33,611.8	34,573.0
Department of the Army	2,464.3	2,536.2	2,852.9	3,123.7	3,414.4	3,848.5	4,017.4	4,230.0	4,278.5	5,009.7	4,899.6
Department of the Navy	3,919.4	3,926.4	4,507.9	4,916.9	5,394.7	6,023.5	6,859.8	8,304.9	9,939.8	9,422.1	9,081.9
Department of the Air Force	3,969.9	4,428.0	5,323.6	6,756.6	8,209.1	9,640.9	10,849.7	12,263.7	14,133.1	14,101.0	14,774.5
Defense Agencies	555.1	814.2	981.4	1,160.0	1,420.0	1,817.3	1,217.8	2,290.0	4,068.2	4,995.8	5,690.3
Def Civil Preparedness Agcy	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Operational Test & Evaluation, Director	NA	NA	NA	NA	NA	NA	NA	NA	.0	4.4	7.2
Test & Evaluation, Deputy Under Secretary of Defense	23.9	28.3	40.4	35.7	44.8	43.3	54.7	55.1	71.6	78.8	119.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-92. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Education	NA	136.5	120.9	.0	150.1	111.5	181.3	95.7	125.3	138.3	142.9
Department of Energy	4,413.0	4,956.8	5,660.2	6,125.9	5,785.4	5,641.9	5,656.4	5,803.0	5,381.7	5,432.7	5,743.7
Dept of Health, Education, & Welfare, total	3,070.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	179.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	58.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	56.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	14.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	15.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	74.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	2,507.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	13.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	25.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	75.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	11.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	3,172.7	3,554.1	3,997.5	4,052.1	4,118.6	4,484.9	5,049.6	5,531.4	5,751.0	6,923.2
Alcohol, Drug Abuse, & Mental Health Administration	NA	184.7	218.1	251.1	292.0	289.8	276.1	349.8	396.6	476.1	554.8
Centers for Disease Control & Prevention	NA	72.4	72.6	83.0	88.4	80.4	46.3	47.6	52.7	66.2	88.7
Food & Drug Administration	NA	40.6	61.0	57.6	59.4	75.6	86.9	96.2	89.1	85.6	91.3
Health Care Financing Admin	NA	19.5	29.4	35.4	29.1	30.2	33.1	33.5	28.1	36.1	31.4
Health Resources Admin	NA	3.2	2.8	3.7	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	17.5	16.3	13.4	16.0	13.0	9.2	10.0
Health Services Admin	NA	23.1	20.2	16.9	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	57.1	48.5	85.5	33.0	22.3	15.4	21.4	52.0	51.1	50.9
National Insts of Health	NA	2,713.4	3,029.3	3,392.2	3,475.0	3,562.9	3,981.1	4,446.3	4,867.2	4,985.2	6,060.2
Office of the Assistant Secretary for Health	NA	14.7	27.0	37.2	29.0	16.9	11.5	15.8	21.6	23.5	20.0
Office of the Secretary	NA	26.5	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7
Social Security Admin	NA	17.4	21.4	15.4	15.4	9.6	10.7	13.3	5.0	9.8	11.1
Dept of Housing & Urban Dvlpmnt ...	59.3	74.3	65.8	54.1	37.0	30.9	24.9	18.6	13.9	19.7	14.9
Dept of the Interior, total	339.9	404.3	431.5	436.9	394.9	412.7	435.9	417.0	445.4	394.7	419.6
Bonneville Power Admin .....	.0	.0	.0	14.0	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.2	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.6	3.7
Bureau of Mines	104.2	121.4	130.8	109.0	105.2	102.0	111.4	100.4	131.0	91.2	87.6
Bureau of Reclamation	10.9	11.0	13.1	13.4	10.7	11.1	10.1	10.5	12.0	10.6	4.4
Geological Survey	128.7	144.2	145.2	168.2	150.1	171.4	228.4	230.8	226.5	211.2	238.6
Minerals Management Service ...	NA	NA	NA	NA	.0	1.3	1.5	1.5	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary	2.1	1.5	1.9	2.0	.4	1.3	.6	.3	.6	2.0	.4
Office of Surface Mining Reclamation & Enforcement ...	.0	5.0	7.8	5.8	1.4	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	17.6	23.8	30.0	21.8	20.3	8.3	2.6	NA	NA	NA	NA
US Fish & Wildlife Service	67.5	87.3	93.0	90.5	90.4	98.3	62.8	52.1	51.2	55.7	63.3
Department of Justice, total	33.5	45.9	45.3	26.1	36.6	27.6	26.5	32.7	32.1	39.0	48.1
Bureau of Prisons	1.8	3.3	2.1	2.5	1.7	1.7	1.6	1.5	3.0	6.9	6.0
Drug Enforcement Admin	1.7	2.7	4.4	1.2	2.7	2.5	2.0	1.6	2.5	2.2	2.5
Fed Bureau of Investigation .....	.9	2.5	1.8	1.5	1.1	1.9	2.5	8.9	6.9	6.9	12.7
Immigration & Naturalization Service .....	.3	.3	.3	1.0	.3	.2	.6	.4	.4	.4	5.2
Office of Justice Programs	27.1	35.5	35.1	19.2	30.4	21.1	19.6	20.1	19.2	22.4	21.6
Office of Legal Policy	1.6	1.6	1.6	.7	.4	.2	.3	.2	.2	.2	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-92. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	97.6	109.2	137.7	61.6	29.4	16.8	14.1	13.7	10.9	20.3	31.8
Bureau of Labor Statistics	1.2	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.6	5.1	4.7	3.0	1.3	1.3	1.3	-	.0	1.0	.1
Employment & Training Admin ...	86.6	93.0	121.7	52.1	20.2	6.0	3.5	4.5	3.4	4.4	11.2
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.7	3.5	2.8	1.7	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.3	1.0	.9	1.5	1.9	2.6	2.1	2.7	6.1
Pension Benefit Guaranty Corp ..	NA	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3
Pension & Welfare Benefits											
Administration	NA	NA	NA	NA	NA	NA	1.2	1.1	.9	1.0	2.6
Department of State, total	57.5	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2
Agcy for Internat'l Dvlpmnt	54.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.8	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	377.3	372.4	391.0	432.1	360.0	282.3	357.5	430.2	445.2	347.7	332.1
Coast Guard	20.3	20.5	17.9	25.9	20.0	19.6	19.5	19.0	16.7	17.8	14.9
Federal Aviation Admin	100.2	111.4	109.7	125.9	110.9	99.5	167.5	283.7	317.6	190.5	190.2
Federal Highway Admin	52.9	48.9	53.4	59.1	42.5	32.5	51.1	47.5	46.1	76.3	60.1
Federal Railroad Admin	62.4	58.0	63.5	55.0	25.6	18.5	14.7	16.2	15.4	10.9	10.6
Federal Transit Admin	52.5	50.5	58.9	61.9	69.8	36.5	31.2	18.6	8.8	9.4	1.4
Maritime Administration	NA	NA	NA	17.4	18.9	13.5	11.1	10.2	14.1	7.2	2.6
National Highway Traffic											
Safety Administration	68.5	53.6	60.3	60.8	60.2	51.1	53.2	28.0	19.1	28.9	45.2
Office of the Secretary	19.7	16.7	14.9	13.9	5.6	4.0	5.0	4.7	5.2	4.7	5.2
Research & Special Programs											
Administration .....	.8	12.8	12.4	12.3	6.5	7.1	4.2	2.4	2.3	2.1	2.0
Dept of the Treasury, total	9.9	9.6	10.9	10.8	13.6	15.6	13.6	24.3	23.0	26.4	25.8
Bureau of Alcohol, Tobacco, & Firearms	2.0	2.5	1.6	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	3.7	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0
Internal Revenue Service	2.4	3.6	4.0	4.2	5.4	8.0	7.9	15.9	13.4	14.1	14.0
US Customs Service	1.8	1.4	3.0	3.5	3.2	3.4	1.9	2.3	4.9	7.1	9.3
United States Mint .....	.0	.0	.0	.0	.0	.0	.0	.6	-	.1	.2
United States Secret Service	NA	NA	-	.1	.3	.4	.2	.6	.5	.5	.4
Department of Veterans Affairs	123.9	123.1	138.6	144.3	140.7	164.7	193.6	222.7	185.1	198.8	201.9
Other agencies:											
ACTION	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on											
Intergovernmental Relations	1.5	1.7	1.7	1.9	1.8	1.9	2.1	2.0	2.0	1.6	1.4
Appalachian Regional Comm .....	.5	.9	.8	.4	.4	.2	.4	.2	.2	.1	.2
Community Services Admin	24.1	19.5	25.5	26.2	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	4.2	5.8	6.3	.9	.2	.5	1.2	2.2	2.0	2.1	1.2
Environmental Protection Agcy	312.5	388.9	384.7	344.3	336.2	312.5	266.1	274.8	306.9	325.9	340.0
Fed Communications Comm	2.4	1.9	3.1	1.6	1.2	1.3	.9	1.1	.9	1.0	1.2
Federal Emergency Management											
Agency, total	6.8	12.0	11.2	11.6	8.8	3.2	10.9	4.6	.0	.0	.0
National Fire Prevention & Control Administration	6.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.5	3.2	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4
Foundation for Ed Assistance	NA	NA	NA	111.8	NA	NA	NA	NA	NA	NA	NA
General Services Admin	2.7	.5	.2	.6	1.0	.5	2.4	.4	1.9	1.6	2.3
International Development											
Cooperation Agency, total	NA	80.3	114.3	166.1	188.6	225.2	207.2	233.0	255.5	263.2	229.1
Agcy for Internat'l Dvlpmnt	NA	80.3	114.3	166.1	188.6	225.2	207.2	233.0	255.5	263.2	229.1
Interstate Commerce Comm .....	.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-92. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Library of Congress	4.7	5.4	6.5	5.1	5.4	6.7	7.2	6.3	6.9	6.5	7.1
Nat'l Aero & Space Admin	3,432.1	3,395.2	3,605.7	3,705.5	3,252.9	2,646.2	3,730.6	3,217.1	3,730.6	3,564.3	4,230.4
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7
National Science Foundation	738.6	804.6	848.2	905.0	1,015.1	994.7	1,151.0	1,250.0	1,468.1	1,459.9	1,550.7
Nuclear Regulatory Commission	131.7	145.4	182.8	216.0	208.6	244.0	198.6	161.1	136.0	124.4	113.5
Office of Personnel Management ...	4.5	6.0	6.8	8.1	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Smithsonian Institution	34.7	37.8	39.5	43.9	48.4	57.3	55.2	59.8	64.0	71.5	74.8
Tennessee Valley Authority	53.4	45.4	75.3	94.3	89.5	63.7	66.3	81.0	79.5	76.9	86.9
United States Arms Control & Disarmament Agency	3.6	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	4.6	3.4
US Information Agency .....	.1	.1	.1	1.2	-	-	-	1.1	2.4	10.0	1.5
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-92a. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	61,476.4	64,151.1	63,676.4	65,719.0	68,385.8	68,328.3	68,694.4	68,007.6	70,892.0	71,780.3	73,150.4
Departments:											
Dept of Agriculture, total	1,129.8	1,196.7	1,269.4	1,382.8	1,453.4	1,486.9	1,504.3	1,438.3	1,464.4	1,563.1	1,573.1
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.5	2.7	3.7	4.3	4.7	4.6	5.0	4.5	4.5	4.7	4.8
Agricultural Research Svc	579.7	603.4	622.9	686.5	732.6	735.3	758.4	739.9	770.4	821.2	855.2
Animal & Plant Health											
Inspection Service	7.7	14.0	15.7	16.7	17.1	19.2	19.1	19.5	19.8	19.5	19.0
Cooperative State Research,											
Ed. & Extension Svc	336.9	361.9	395.6	415.1	433.2	456.9	463.9	434.9	435.8	447.3	437.6
Economic Research Service	50.0	50.7	53.0	57.5	61.5	57.3	52.0	50.1	42.4	69.5	54.7
Food Safety Inspection Svc .....	.0	.0	.0	.0	.0	.0	.0	-	-	-	-
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	1.1	.9	1.3	1.4	1.4	1.4
Forest Service	136.4	144.5	159.8	182.0	185.8	195.7	197.8	180.4	181.8	190.7	190.7
Grain Inspection Packers &											
Stockyards Administration	1.1	.6	.7	1.8	1.8	1.8	1.5	2.5	2.8	2.8	2.8
Human Nutrition Info Svc	8.4	9.0	8.9	9.7	7.3	5.3	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	2.8	2.7	3.2	3.5	3.9	3.6	4.2	3.7	3.0	3.4	3.5
Office of International											
Cooperation & Dvlpmnt	2.5	4.3	3.1	2.4	2.6	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	403.2	441.5	500.7	643.4	652.0	810.3	886.4	945.1	1,037.6	1,050.4	1,050.8
Bureau of the Census	5.0	6.7	6.6	5.5	5.0	5.4	5.1	6.6	5.1	5.5	9.1
Economic Development Admin	1.3	1.5	1.0	1.1	.7	.3	1.0	.6	.6	.6	.6
National Institute of											
Standards & Technology	121.5	120.3	144.1	160.6	189.8	237.8	350.4	404.9	473.3	448.1	485.8
National Oceanic &											
Atmospheric Administration	269.1	306.7	345.3	472.2	452.4	562.9	523.6	528.5	530.9	570.1	529.6
National Telecommunications &											
Information Administration	6.2	6.2	3.6	4.0	4.2	3.9	6.4	4.5	27.8	26.2	25.8
Office of the Secretary .....	.1	-	-	-	-	-	-	.0	.0	.0	.0
Department of Defense, total	36,869.1	37,140.0	33,447.2	34,631.7	34,525.9	35,179.2	34,001.9	35,501.6	35,699.0	34,396.2	33,604.5
Department of the Army	5,241.3	5,797.1	5,724.5	6,295.2	6,125.3	5,797.8	5,137.3	4,954.4	4,889.9	5,003.9	4,939.5
Department of the Navy	9,559.5	9,453.5	7,902.0	8,115.0	9,187.5	8,213.3	9,454.1	9,605.0	8,417.1	7,843.0	8,195.5
Department of the Air Force	15,390.5	14,888.1	13,043.8	12,532.3	12,287.9	12,799.2	12,051.8	13,474.4	14,912.1	14,159.6	12,929.7
Defense Agencies	6,501.3	6,853.6	6,685.3	7,450.3	6,689.7	8,125.3	7,112.1	7,198.7	7,182.6	7,111.4	7,262.1
Operational Test &											
Evaluation, Director	31.6	32.0	22.3	9.4	12.3	11.9	12.4	22.1	21.5	27.8	26.6
Test & Evaluation, Deputy											
Under Secretary of Defense	145.0	115.8	69.4	229.4	223.2	231.8	234.3	247.1	275.8	250.4	251.1
Department of Education	155.7	150.7	117.2	135.5	186.7	179.2	180.6	172.0	169.1	189.6	228.5
Department of Energy	6,039.0	6,365.3	6,827.1	7,232.7	7,668.3	6,896.5	7,016.3	6,656.1	6,485.3	6,766.6	7,349.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-92a. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Department of Health & Human Services, total	7,773.4	8,363.8	9,822.1	9,091.5	10,475.2	10,352.5	11,245.2	10,419.0	11,457.7	13,116.4	14,134.8
Administration on Aging	NA	NA	20.6	20.2	20.9	19.1	20.7	2.9	4.0	10.0	10.0
Administration for Children & Families	NA	NA	110.2	35.1	19.3	11.3	12.0	11.9	12.7	15.3	19.7
Agency for Health Care Policy & Research	NA	5.3	11.9	113.5	87.6	111.0	133.0	80.0	110.0	93.0	94.0
Alcohol, Drug Abuse, & Mental Health Administration ¹	695.7	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	306.0	336.0	362.0
Food & Drug Administration	96.0	95.0	143.5	150.0	174.2	160.5	147.9	138.8	165.9	188.0	188.6
Health Care Financing Admin	32.5	14.4	21.7	63.9	69.5	72.3	72.9	75.4	66.3	46.4	50.6
Hlth Resources & Svcs Admin	10.5	11.9	11.0	10.5	11.0	17.8	14.4	11.9	13.8	14.2	14.4
Human Development Svcs	73.3	76.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	6,699.0	7,181.1	7,890.4	8,491.4	9,893.3	9,725.7	10,511.5	9,779.8	10,687.0	12,328.1	13,305.4
Office of the Assistant Secretary for Health	26.0	22.3	18.2	21.7	15.8	.7	.6	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	5.2	5.0	3.5	5.0	22.9	9.3	14.1
Office of the Assistant Sec, Planning & Eval	NA	NA	NA	NA	NA	NA	NA	3.0	21.0	8.0	13.0
Office of Public Health & Science	NA	NA	NA	NA	NA	NA	NA	2.0	1.9	1.3	1.1
Social Security Admin	14.8	13.9	11.9	33.4	15.9	22.2	11.3	NA	NA	NA	NA
Substance Abuse & Mental Health Services Admin	NA	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0
Dept of Housing & Urban Dvlpmt ...	20.7	21.7	18.1	23.5	28.4	28.5	38.0	36.2	31.7	40.4	41.4
Dept of the Interior, total	485.3	503.0	556.2	628.4	651.8	644.9	558.8	547.2	572.6	640.5	639.1
Bureau of Land Management	3.0	2.8	8.8	6.3	8.9	.0	.0	.0	.0	.0	.0
Bureau of Mines	92.6	96.7	97.7	113.9	111.8	107.9	.0	NA	NA	NA	NA
Bureau of Reclamation	4.2	5.8	8.7	12.2	9.6	7.4	8.0	6.5	6.8	8.8	10.2
Geological Survey	300.9	301.3	319.5	370.3	385.2	375.5	359.3	498.6	517.2	572.8	567.3
Minerals Management Service ...	1.9	2.0	2.7	4.1	6.1	19.5	20.8	21.7	22.6	25.3	27.6
Nat'l Biological Svc	NA	NA	NA	NA	.0	110.3	151.0	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	38.1	24.2	19.7	20.2	26.0	33.5	34.0
Office of the Secretary .....	.4	.2	.6	.9	.4	.1	-	.0	.0	.0	.0
Office of Surface Mining Reclamation & Enforcement ...	.7	.8	1.0	.3	.4	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	62.2	73.3	89.7	89.3	91.3	.0	.0	.0	.0	.0	.0
Department of Justice, total	36.0	38.2	40.4	42.9	46.2	42.0	49.0	72.7	75.5	76.1	73.3
Bureau of Prisons	3.8	3.2	5.7	5.9	6.1	5.4	5.7	5.2	4.6	6.0	6.2
Drug Enforcement Admin ²	2.7	2.4	2.8	1.5	1.1	1.7	.4	1.2	-	-	-
Fed Bureau of Investigation	6.5	8.2	10.8	10.9	11.3	7.0	10.9	33.5	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.4	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	22.5	24.0	20.7	24.1	27.2	27.6	31.5	32.6	35.0	33.9	30.9
Department of Labor, total	28.9	45.2	45.6	70.8	57.8	60.7	51.7	50.1	38.5	52.3	51.8
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	6.9	7.1	13.1	13.3	12.6	12.4	12.4
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	9.2	25.6	23.7	51.0	39.2	41.8	23.1	24.6	18.2	33.3	32.6
Labor-Management Relations & Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	4.5	2.5	2.6	3.1	2.5	3.2	4.3	6.6	5.4	4.5	4.6
Office of the Secretary	6.1	7.1	8.7	5.7	5.4	5.2	6.2	2.6	.2	.1	.1
Pension Benefit Guaranty Corp ..	.3	.5	.5	.9	1.3	.7	1.4	.6	.0	.0	.0
Pension & Welfare Benefits Administration	1.3	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	4.7	4.7	5.9	5.6	5.3	.4	.5	1.0	.6	.6	.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-92a. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	291.5	287.3	361.0	411.1	455.3	536.9	661.4	593.0	548.4	562.3	836.5
Coast Guard	18.1	21.4	14.9	22.8	32.2	26.1	21.1	23.4	23.3	22.8	19.5
Federal Aviation Admin	153.5	185.5	216.0	250.7	260.1	258.9	270.8	265.8	236.0	234.0	287.3
Federal Highway Admin	76.5	44.0	86.1	81.2	87.5	178.5	260.6	236.5	218.0	218.4	440.2
Federal Railroad Admin	7.0	7.0	14.3	21.5	22.8	19.6	22.8	20.0	18.1	28.4	30.5
Federal Transit Admin	2.0	2.3	2.1	1.5	16.5	18.5	33.4	22.4	19.5	18.6	11.5
Maritime Administration .....	.0	.9	1.5	1.7	1.7	1.7	2.3	.0	.0	.0	.0
National Highway Traffic Safety Administration	28.5	16.9	19.2	24.5	28.3	26.9	41.4	15.0	23.0	27.0	35.0
Office of the Secretary	4.2	6.9	4.7	5.0	4.4	2.5	4.0	2.8	2.0	3.0	4.0
Research & Special Programs Administration	1.6	2.4	2.2	2.3	1.7	4.1	4.9	7.0	8.4	10.2	8.5
Dept of the Treasury, total	23.5	25.2	30.4	24.5	16.6	20.7	61.5	60.2	59.8	74.2	75.6
Bureau of Engraving & Printing	1.7	2.1	3.5	2.0	3.2	3.4	1.8	1.7	1.7	1.9	1.9
Financial Crimes Enforcement Network .....	.0	.0	1.8	1.5	1.5	.0	.0	.0	.0	.0	.0
Internal Revenue Svc	14.0	16.3	17.3	17.3	6.5	11.3	49.7	51.2	50.8	61.7	62.9
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴	6.9	6.3	3.8	2.3	4.1	4.6	8.6	6.3	6.3	8.9	8.9
United States Mint .....	.3	.1	.5	.0	-	.4	.3	.0	-	.3	.3
US Secret Service .....	.6	.5	.4	.6	.6	.5	.6	.5	.4	.6	.8
Department of Veterans Affairs	186.4	219.0	221.6	207.6	250.8	246.0	258.3	240.6	243.2	277.0	300.8
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.2	1.2	1.2	1.5	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm	1.3	1.2	1.3	1.2	1.2	.4	.4	.1	.1	.2	.2
Environmental Protection Agcy	343.2	388.5	400.1	411.9	497.7	558.3	495.5	476.3	537.0	596.0	616.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	.7	3.6	20.9	7.6	5.5	1.3	4.1	1.6	.1	.8
International Development Cooperation Agency, total	279.1	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	183.9	184.2
Agency for International Development ⁵	279.1	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	183.9	184.2
Library of Congress	8.0	8.4	8.6	10.0	10.7	12.5	7.7	11.0	2.5	2.5	2.6
Nat'l Aero & Space Admin ⁶	5,506.1	6,762.2	7,675.0	8,386.6	8,885.4	8,576.8	9,116.2	8,094.0	9,715.0	9,605.0	9,576.0
Nat'l Archives & Records Admin .....	.3	.4	.7	.7	.3	.3	.1	.1	.1	.1	.1
National Science Foundation	1,613.4	1,563.0	1,687.1	1,813.6	1,841.7	1,983.6	1,977.0	2,212.0	2,318.0	2,331.0	2,571.0
Nuclear Regulatory Commission	113.2	111.5	107.5	116.5	119.6	92.4	88.8	75.2	67.5	53.5	52.3
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Institution	82.6	95.4	98.5	95.4	97.2	127.4	125.0	125.0	126.0	131.0	138.0
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	61.7	66.7	72.3	103.5	109.6	97.9	93.1	6.1	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-92a. Federal outlays for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
United States Arms Control & Disarmament Agency	2.8	0.2	0.4	2.1	1.5	1.3	1.1	0.7	1.2	0.8	0.8
US Information Agency	1.0	.0	.2	.2	.2	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-93. Federal outlays for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	24,020.1	25,838.2	29,154.2	32,459.1	34,390.7	36,659.4	39,691.0	44,171.4	50,609.1	51,611.7	54,739.4
Departments:											
Dept of Agriculture, total	553.8	608.7	659.8	743.4	807.2	826.0	864.3	889.0	918.0	922.9	971.2
Agricultural Cooperative Svc	NA	NA	1.6	1.3	1.7	2.1	2.2	2.9	2.6	2.8	2.7
Agricultural Marketing Svc .....	.0	.9	1.3	1.2	1.5	.6	1.7	1.3	1.7	1.4	1.6
Agricultural Research Svc	NA	NA	NA	390.1	417.5	438.7	454.3	466.2	468.1	463.2	482.1
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6
Cooperative State Research, Ed. & Extension Service	NA	NA	NA	199.0	219.8	219.6	235.7	236.7	254.8	267.1	277.3
Economic Research Service	NA	NA	NA	38.0	37.0	36.8	40.9	45.1	46.0	43.2	47.2
Economics, Stat. & Coop Svc	32.4	35.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	31.1	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	84.6	102.2	97.0	98.6	113.2	109.8	108.8	113.1	112.5	119.9	135.8
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.9	1.0	1.2	1.0
Human Nutrition Info Svc	NA	NA	NA	.0	3.8	5.8	7.9	7.2	10.6	9.6	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	7.0	7.6	8.2	8.4	8.0	3.5	3.6
Office of International Cooperation & Development ...	NA	.0	6.4	6.9	4.6	4.1	3.6	5.8	7.5	5.1	5.0
Office of Transportation	NA	.5	.8	.9	.9	.8	1.0	1.3	1.0	1.0	1.1
Science & Ed Admin, total	436.8	469.5	521.7	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	301.9	312.9	347.5	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	134.9	156.6	174.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	269.2	305.2	355.9	345.5	285.4	334.5	327.0	373.6	372.6	307.0	378.6
Bureau of the Census	3.3	2.7	3.2	3.8	3.7	4.3	4.4	4.8	4.6	4.5	5.6
Economic Development Admin ...	25.1	26.7	35.5	35.5	12.1	5.3	5.1	7.8	7.8	7.2	2.4
Maritime Administration	18.5	18.2	23.5	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	58.1	63.4	76.8	83.9	86.6	93.3	94.1	102.2	103.3	100.0	101.3
National Oceanic & Atmospheric Administration	162.5	190.1	206.7	208.1	174.1	222.0	214.7	249.1	247.2	187.1	263.0
National Telecommunications & Information Administration	1.3	3.3	9.1	12.9	8.0	9.6	8.6	9.0	8.5	7.8	6.1
Office of the Secretary .....	.0	.3	.6	.1	.2	-	.1	.6	1.2	.3	.1
Patent & Trademark Office .....	.5	.5	.5	1.1	.7	.0	.0	.0	.0	.0	.0
Department of Defense, total	10,622.8	11,497.3	13,501.4	15,754.5	18,251.2	21,105.8	22,619.3	26,742.0	32,210.5	33,254.4	34,156.8
Department of the Army	2,457.5	2,534.1	2,845.3	3,114.8	3,400.9	3,827.0	3,983.0	4,176.6	4,223.5	4,949.0	4,837.8
Department of the Navy	3,870.3	3,873.5	4,417.0	4,824.7	5,269.4	5,886.8	6,709.4	8,161.1	9,809.1	9,357.1	9,003.1
Department of the Air Force	3,719.8	4,263.1	5,220.6	6,626.6	8,141.4	9,537.2	10,658.5	12,063.9	14,044.0	13,906.8	14,567.0
Defense Agencies	548.5	798.3	978.2	1,152.6	1,394.8	1,811.5	1,213.6	2,285.2	4,062.4	4,958.4	5,622.1
Def Civil Preparedness Agcy	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Operational Test & Evaluation, Director	NA	NA	NA	NA	NA	NA	NA	NA	.0	4.4	7.2
Test & Evaluation, Deputy Under Secretary of Defense	23.9	28.3	40.4	35.7	44.8	43.3	54.7	55.1	71.6	78.8	119.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-93. Federal outlays for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Education	NA	136.5	120.9	.0	150.1	111.5	181.3	95.7	124.5	122.6	131.8
Department of Energy	3,931.7	4,303.3	4,697.5	5,041.4	4,842.1	4,817.5	4,740.3	4,947.7	4,655.8	4,711.3	4,964.7
Dept of Health, Education, & Welfare, total	3,002.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	179.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	58.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	54.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	14.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	15.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	74.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	2,440.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	13.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	25.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmt Svcs	75.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	11.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	3,099.3	3,477.2	3,954.9	4,015.3	4,092.0	4,450.3	5,007.0	5,498.7	5,719.5	6,892.5
Alcohol, Drug Abuse, & Mental Health Administration	NA	184.4	217.9	250.9	291.7	288.8	272.0	348.4	396.1	475.5	554.8
Centers for Disease Control & Prevention	NA	72.4	72.6	83.0	88.4	80.4	46.3	47.6	52.7	66.2	88.7
Food & Drug Administration	NA	40.0	60.3	57.1	58.4	73.5	76.9	81.2	79.1	83.7	89.6
Health Care Financing Admin	NA	19.5	29.4	35.4	29.1	30.2	33.1	33.5	28.1	36.1	31.4
Health Resources Admin	NA	3.2	2.8	3.7	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	17.5	16.3	13.4	16.0	13.0	9.2	10.0
Health Services Admin	NA	23.1	20.2	16.9	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	57.1	48.5	85.5	33.0	22.3	15.4	21.4	52.0	51.1	50.9
National Insts of Health	NA	2,641.0	2,953.2	3,350.2	3,439.6	3,539.5	3,960.6	4,420.1	4,845.0	4,956.2	6,031.2
Office of the Assistant Secretary for Health	NA	14.7	27.0	37.2	29.0	16.9	11.5	15.8	21.6	23.5	20.0
Office of the Secretary	NA	26.5	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7
Social Security Admin	NA	17.4	21.4	15.4	15.4	9.6	10.7	13.3	5.0	9.8	11.1
Dept of Housing & Urban Dvlpmt ...	59.3	74.3	65.8	54.1	37.0	30.9	24.9	18.6	13.9	19.7	14.9
Dept of the Interior, total	332.3	395.3	422.7	432.8	393.6	410.3	430.7	412.8	439.3	390.0	414.6
Bonneville Power Admin .....	.0	.0	.0	13.7	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.2	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.6	3.7
Bureau of Mines	104.1	117.1	128.4	106.9	105.0	101.9	111.3	100.4	131.0	91.2	87.6
Bureau of Reclamation	10.9	11.0	13.1	13.4	10.7	11.1	10.1	10.5	12.0	10.6	4.4
Geological Survey	128.7	144.2	145.2	168.2	150.1	169.9	227.2	229.9	225.6	210.4	237.9
Minerals Management Service ...	NA	NA	NA	NA	.0	1.3	1.5	1.5	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary	2.1	1.5	1.9	2.0	.4	1.3	.6	.3	.6	2.0	.4
Office of Surface Mining Reclamation & Enforcement ...	.0	5.0	7.5	5.8	1.4	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	17.0	23.1	29.3	21.1	19.4	8.3	2.6	NA	NA	NA	NA
US Fish & Wildlife Service	60.5	83.2	87.7	89.5	90.1	97.5	58.8	48.8	46.0	51.7	59.0
Department of Justice, total	33.5	45.9	45.3	26.1	36.6	27.6	26.5	32.7	32.1	38.7	48.1
Bureau of Prisons	1.8	3.3	2.1	2.5	1.7	1.7	1.6	1.5	3.0	6.9	6.0
Drug Enforcement Admin	1.7	2.7	4.4	1.2	2.7	2.5	2.0	1.6	2.5	2.2	2.5
Fed Bureau of Investigation .....	.9	2.5	1.8	1.5	1.1	1.9	2.5	8.9	6.9	6.6	12.7
Immigration & Naturalization Service .....	.3	.3	.3	1.0	.3	.2	.6	.4	.4	.4	5.2
Office of Justice Programs	27.1	35.5	35.1	19.2	30.4	21.1	19.6	20.1	19.2	22.4	21.6
Office of Legal Policy	1.6	1.6	1.6	.7	.4	.2	.3	.2	.2	.2	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-93. Federal outlays for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 3 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	97.6	109.2	137.7	61.6	29.4	16.8	14.1	13.7	10.9	20.3	31.8
Bureau of Labor Statistics	1.2	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.6	5.1	4.7	3.0	1.3	1.3	1.3	-	.0	1.0	.1
Employment & Training Admin ...	86.6	93.0	121.7	52.1	20.2	6.0	3.5	4.5	3.4	4.4	11.2
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.7	3.5	2.8	1.7	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.3	1.0	.9	1.5	1.9	2.6	2.1	2.7	6.1
Pension Benefit Guaranty Corp ..	NA	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3
Pension & Welfare Benefits											
Administration	NA	NA	NA	NA	NA	NA	1.2	1.1	.9	1.0	2.6
Department of State, total	57.4	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2
Agcy for Internat'l Dvlpmt	54.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.8	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	364.1	356.2	374.7	415.9	347.0	272.4	344.6	416.1	429.8	336.6	321.0
Coast Guard	19.6	20.5	17.9	25.9	20.0	19.6	19.5	19.0	16.7	17.8	14.6
Federal Aviation Admin	99.2	101.9	104.2	119.8	106.6	90.3	155.1	270.1	303.3	180.1	179.6
Federal Highway Admin	52.5	48.7	53.1	56.3	42.5	32.5	51.1	47.5	45.5	76.0	60.1
Federal Railroad Admin	51.5	51.7	53.2	48.2	17.4	18.3	14.7	16.2	15.4	10.9	10.3
Federal Transit Admin	52.5	50.5	58.9	61.9	69.8	36.5	31.2	18.6	8.8	9.4	1.4
Maritime Administration	NA	NA	NA	17.4	18.9	13.5	11.1	10.2	14.1	7.2	2.6
National Highway Traffic											
Safety Administration	68.3	53.4	60.1	60.3	59.7	50.6	52.7	27.5	18.6	28.4	45.2
Office of the Secretary	19.7	16.7	14.9	13.9	5.6	4.0	5.0	4.7	5.2	4.7	5.2
Research & Special Programs											
Administration .....	.8	12.8	12.4	12.3	6.5	7.1	4.2	2.4	2.3	2.1	2.0
Dept of the Treasury, total	9.9	9.5	10.9	10.8	13.6	15.5	13.5	24.2	22.9	26.3	25.7
Bureau of Alcohol, Tobacco, & Firearms	2.0	2.5	1.6	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	3.7	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0
Internal Revenue Service	2.4	3.6	4.0	4.2	5.4	8.0	7.9	15.9	13.4	14.1	14.0
US Customs Service	1.8	1.3	3.0	3.5	3.1	3.3	1.8	2.2	4.8	7.0	9.2
United States Mint .....	.0	.0	.0	.0	.0	.0	.0	.6	-	.1	.2
United States Secret Service	NA	NA	-	.1	.3	.4	.2	.6	.4	.5	.4
Department of Veterans Affairs	114.3	120.3	134.4	137.8	137.7	154.1	189.0	215.1	181.2	195.1	197.3
Other agencies:											
ACTION	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on											
Intergovernmental Relations	1.5	1.7	1.7	1.9	1.8	1.9	2.1	2.0	2.0	1.6	1.4
Appalachian Regional Comm .....	.5	.9	.8	.4	.4	.2	.4	.2	.2	.1	.2
Community Services Admin	24.1	19.5	25.5	26.2	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	3.9	3.1	3.6	.9	.2	.5	1.2	2.2	2.0	2.1	1.2
Environmental Protection Agcy	310.3	386.5	384.7	344.3	336.2	312.5	266.1	274.8	306.9	325.9	340.0
Fed Communications Comm	2.4	1.9	3.1	1.6	1.2	1.3	.9	1.1	.9	1.0	1.2
Federal Emergency Management											
Agency, total	6.8	12.0	11.2	11.6	8.8	3.2	10.9	4.6	.0	.0	.0
National Fire Prevention & Control Administration	6.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.5	3.2	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4
Foundation for Ed Assistance	NA	NA	NA	111.8	NA	NA	NA	NA	NA	NA	NA
General Services Admin	2.7	.5	.2	.6	1.0	.5	2.4	.4	1.2	1.6	2.3
International Development											
Cooperation Agency, total	NA	75.8	107.8	159.9	178.3	212.8	195.8	220.3	241.5	248.7	216.6
Agcy for Internat'l Dvlpmt	NA	75.8	107.8	159.9	178.3	212.8	195.8	220.3	241.5	248.7	216.6
Interstate Commerce Comm .....	.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-93. Federal outlays for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Library of Congress	4.7	5.4	6.5	5.1	5.4	6.7	7.2	6.3	6.9	6.5	7.1
Nat'l Aero & Space Admin	3,307.9	3,262.5	3,465.4	3,558.6	3,140.7	2,538.0	3,538.7	2,970.3	3,431.5	3,250.4	3,831.7
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7
National Science Foundation	700.5	775.2	830.6	892.3	1,013.6	991.8	1,108.0	1,186.0	1,410.7	1,410.0	1,494.0
Nuclear Regulatory Commission	125.4	137.5	175.4	208.7	208.6	244.0	198.6	161.1	136.0	124.4	113.5
Office of Personnel Management ...	4.5	6.0	6.8	8.1	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Smithsonian Institution	34.6	37.2	39.1	43.5	48.0	56.2	54.6	58.9	62.5	69.9	73.2
Tennessee Valley Authority	31.5	37.2	74.7	93.9	89.3	63.3	66.0	80.7	78.9	76.5	86.4
United States Arms Control & Disarmament Agency	3.6	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	3.6	3.4
US Information Agency .....	.1	.1	.1	1.2	-	-	-	1.1	2.4	10.0	1.5
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-93a. Federal outlays for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	59,450.4	62,135.3	61,130.4	62,934.5	65,241.3	66,150.8	66,662.0	66,142.0	68,897.2	69,849.2	71,111.5
Departments:											
Dept of Agriculture, total	1,037.5	1,072.5	1,189.4	1,246.0	1,303.9	1,353.6	1,375.8	1,335.7	1,342.2	1,399.8	1,420.5
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.5	2.7	3.7	4.3	4.7	4.6	5.0	4.5	4.5	4.7	4.8
Agricultural Research Svc	528.0	548.1	573.5	617.1	643.4	660.0	679.3	672.4	699.5	715.7	744.9
Animal & Plant Health Inspection Service	7.4	8.0	15.7	16.7	17.1	19.2	19.1	18.0	19.8	19.5	19.0
Cooperative State Research, Ed. & Extension Svc	298.3	303.9	380.1	354.9	379.4	404.1	418.8	403.8	386.5	392.2	398.0
Economic Research Service	50.0	50.7	53.0	57.5	61.5	57.3	52.0	50.1	42.4	69.5	54.7
Food Safety Inspection Svc .....	.0	.0	.0	.0	.0	.0	.0	-	-	-	-
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	.7	.9	1.3	1.4	1.4	1.4
Forest Service	134.7	139.6	144.7	174.8	179.3	190.8	193.5	177.9	179.8	188.0	188.0
Grain Inspection Packers & Stockyards Administration	1.1	.6	.7	1.8	1.8	1.8	1.5	2.5	2.8	2.8	2.8
Human Nutrition Info Svc	8.4	9.0	8.9	9.7	7.3	5.3	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	2.8	2.7	3.2	3.5	3.9	3.6	4.2	3.7	3.0	3.4	3.5
Office of International Cooperation & Dvlpmnt	2.5	4.3	3.1	2.4	2.6	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	394.0	426.8	485.1	622.1	629.6	797.4	863.0	918.1	967.1	992.8	1,000.6
Bureau of the Census	5.0	6.7	6.6	5.5	5.0	5.4	5.1	6.6	5.1	5.5	9.1
Economic Development Admin	1.1	1.5	1.0	1.1	.7	.3	1.0	.6	.6	.6	.6
National Institute of Standards & Technology	113.0	112.3	135.9	149.1	180.1	225.2	327.4	378.0	424.4	417.4	449.0
National Oceanic & Atmospheric Administration	268.6	300.1	338.0	462.4	439.5	562.6	523.1	528.5	509.3	543.2	516.2
National Telecommunications & Information Administration	6.2	6.2	3.6	4.0	4.2	3.9	6.4	4.5	27.8	26.2	25.8
Office of the Secretary .....	.1	-	-	-	-	-	-	.0	.0	.0	.0
Department of Defense, total	36,453.4	36,703.2	33,013.5	34,220.8	34,152.7	34,918.2	33,920.9	35,387.0	35,646.6	34,345.8	33,553.7
Department of the Army	5,201.6	5,750.2	5,659.5	6,273.2	6,118.3	5,794.0	5,133.0	4,948.7	4,885.2	4,999.6	4,935.3
Department of the Navy	9,475.0	9,352.3	7,815.0	8,004.0	9,114.0	8,150.5	9,416.6	9,578.5	8,400.2	7,818.2	8,164.2
Department of the Air Force	15,190.8	14,687.9	12,825.6	12,346.1	12,056.9	12,645.5	12,024.9	13,420.3	14,886.7	14,138.7	12,914.9
Defense Agencies	6,409.5	6,765.0	6,621.8	7,358.7	6,628.0	8,084.7	7,099.7	7,170.3	7,177.3	7,111.0	7,261.5
Operational Test & Evaluation, Director	31.6	32.0	22.3	9.4	12.3	11.9	12.4	22.1	21.5	27.8	26.6
Test & Evaluation, Deputy Under Secretary of Defense	145.0	115.8	69.4	229.4	223.2	231.8	234.3	247.1	275.8	250.4	251.1
Department of Education	153.4	147.9	114.5	133.0	173.8	177.2	179.6	172.0	169.1	184.6	228.5
Department of Energy	5,200.6	5,508.4	5,727.2	6,034.7	6,185.1	5,974.7	6,152.2	5,846.2	5,678.6	5,938.8	6,460.5

See explanatory information, if any, and SOURCE at end of table.

**Table C-93a. Federal outlays for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Department of Health & Human Services, total	7,717.4	8,308.7	9,627.3	8,994.8	10,325.9	10,218.2	10,978.2	10,278.5	11,337.2	12,902.4	13,846.6
Administration on Aging	NA	NA	20.6	20.2	20.9	19.1	20.7	2.9	4.0	10.0	10.0
Administration for Children & Families	NA	NA	110.2	35.1	19.3	11.3	12.0	11.9	12.7	15.3	19.7
Agency for Health Care Policy & Research	NA	5.3	11.9	113.5	87.6	111.0	133.0	80.0	110.0	93.0	94.0
Alcohol, Drug Abuse, & Mental Health Administration ¹	695.7	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	306.0	336.0	362.0
Food & Drug Administration	94.0	94.0	125.0	135.7	154.5	138.6	131.3	133.3	157.3	158.6	168.6
Health Care Financing Admin	32.5	14.4	21.7	63.9	69.5	72.3	72.9	75.4	66.3	46.4	50.6
Hlth Resources & Svcs Admin	10.5	11.9	11.0	10.1	9.6	16.4	12.8	11.2	13.1	13.5	13.7
Human Development Svcs	73.3	76.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	6,645.0	7,127.0	7,714.0	8,409.2	9,765.1	9,614.8	10,262.8	9,645.6	10,575.9	12,144.2	13,037.8
Office of the Assistant Secretary for Health	26.0	22.3	18.2	21.7	15.8	.7	.6	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	5.2	5.0	3.5	5.0	22.9	9.3	14.1
Office of the Assistant Sec, Planning & Eval	NA	NA	NA	NA	NA	NA	NA	3.0	21.0	8.0	13.0
Office of Public Health & Science	NA	NA	NA	NA	NA	NA	NA	2.0	1.9	1.3	1.1
Social Security Admin	14.8	13.9	11.9	33.4	15.9	22.2	11.3	NA	NA	NA	NA
Substance Abuse & Mental Health Services Admin	NA	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0
Dept of Housing & Urban Dvlpmnt ...	20.7	21.7	18.1	23.5	28.4	28.5	38.0	36.2	31.7	40.4	41.4
Dept of the Interior, total	478.4	492.5	535.6	610.6	631.0	637.4	552.3	545.1	566.1	638.0	636.8
Bureau of Land Management	3.0	2.8	8.8	6.3	8.9	.0	.0	.0	.0	.0	.0
Bureau of Mines	90.6	93.6	96.3	113.9	111.8	107.9	.0	NA	NA	NA	NA
Bureau of Reclamation	4.2	5.8	8.7	12.2	9.6	7.4	8.0	6.5	6.8	8.8	10.2
Geological Survey	299.5	300.0	316.6	365.9	381.2	369.1	354.1	497.6	512.5	571.6	566.2
Minerals Management Service ...	1.9	1.8	2.5	3.4	5.1	18.3	19.8	20.7	20.8	24.1	26.5
Nat'l Biological Svc	NA	NA	NA	NA	.0	110.3	150.7	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	38.1	24.2	19.7	20.2	26.0	33.5	34.0
Office of the Secretary .....	.4	.2	.6	.9	.4	.1	-	.0	.0	.0	.0
Office of Surface Mining Reclamation & Enforcement ...	.7	.8	1.0	.3	.4	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	58.8	67.3	73.6	76.6	75.5	.0	.0	.0	.0	.0	.0
Department of Justice, total	36.0	38.2	40.4	42.9	46.2	42.0	49.0	72.7	75.5	76.1	73.3
Bureau of Prisons	3.8	3.2	5.7	5.9	6.1	5.4	5.7	5.2	4.6	6.0	6.2
Drug Enforcement Admin ²	2.7	2.4	2.8	1.5	1.1	1.7	.4	1.2	-	-	-
Fed Bureau of Investigation	6.5	8.2	10.8	10.9	11.3	7.0	10.9	33.5	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.4	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	22.5	24.0	20.7	24.1	27.2	27.6	31.5	32.6	35.0	33.9	30.9
Department of Labor, total	28.9	45.2	45.6	70.8	57.8	60.7	51.7	50.1	38.5	52.3	51.8
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	6.9	7.1	13.1	13.3	12.6	12.4	12.4
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	9.2	25.6	23.7	51.0	39.2	41.8	23.1	24.6	18.2	33.3	32.6
Labor-Management Relations & Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	4.5	2.5	2.6	3.1	2.5	3.2	4.3	6.6	5.4	4.5	4.6
Office of the Secretary	6.1	7.1	8.7	5.7	5.4	5.2	6.2	2.6	.2	.1	.1
Pension Benefit Guaranty Corp ..	.3	.5	.5	.9	1.3	.7	1.4	.6	.0	.0	.0
Pension & Welfare Benefits Administration	1.3	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	4.7	4.7	5.9	5.6	5.3	.4	.5	1.0	.6	.6	.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-93a. Federal outlays for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 3 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	278.6	270.6	342.6	394.0	425.2	519.9	634.7	578.8	527.6	544.8	816.7
Coast Guard	18.1	21.0	14.5	22.4	31.7	25.5	20.6	22.8	22.9	22.5	19.3
Federal Aviation Admin	141.0	169.2	199.6	234.9	234.5	247.2	256.8	259.8	218.0	219.0	273.0
Federal Highway Admin	76.5	44.0	86.1	81.2	87.1	174.7	249.6	230.4	215.6	217.1	435.5
Federal Railroad Admin	6.7	7.0	12.8	20.6	21.6	18.6	21.5	18.5	18.1	27.5	29.9
Federal Transit Admin	2.0	2.3	2.1	1.5	14.3	18.5	33.4	22.4	19.5	18.6	11.5
Maritime Administration .....	.0	.9	1.5	1.7	1.7	1.7	2.3	.0	.0	.0	.0
National Highway Traffic Safety Administration	28.5	16.9	19.2	24.5	28.3	26.9	41.4	15.0	23.0	27.0	35.0
Office of the Secretary	4.2	6.9	4.7	5.0	4.4	2.5	4.0	2.8	2.0	3.0	4.0
Research & Special Programs Administration	1.6	2.4	2.2	2.3	1.7	4.1	4.9	7.0	8.4	10.2	8.5
Dept of the Treasury, total	23.4	25.1	30.3	24.4	16.5	18.9	61.4	60.0	59.7	74.0	75.4
Bureau of Engraving & Printing	1.7	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	1.9	1.9
Financial Crimes Enforcement Network .....	.0	.0	1.8	1.5	1.5	.0	.0	.0	.0	.0	.0
Internal Revenue Svc	14.0	16.3	17.3	17.3	6.5	11.3	49.7	51.2	50.8	61.7	62.9
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴	6.8	6.2	3.7	2.2	4.0	4.5	8.5	6.2	6.1	8.8	8.8
United States Mint .....	.3	.1	.5	.0	-	.4	.3	.0	-	.3	.3
US Secret Service .....	.6	.5	.4	.5	.6	.5	.5	.5	.4	.6	.8
Department of Veterans Affairs	184.9	206.6	213.4	202.1	246.0	240.8	251.1	232.1	234.9	269.2	292.3
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.2	1.2	1.2	1.5	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm	1.3	1.2	1.3	1.2	1.2	.4	.4	.1	.1	.2	.2
Environmental Protection Agcy	343.2	388.5	400.1	411.9	495.2	553.5	492.5	476.3	515.0	569.0	596.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation Agency, total	279.1	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	183.9	184.2
Agency for International Development ⁵	279.1	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	183.9	184.2
Library of Congress	8.0	8.4	8.6	10.0	10.7	12.5	7.7	11.0	2.5	2.5	2.6
Nat'l Aero & Space Admin ⁶	4,974.8	6,324.3	7,071.2	7,616.5	8,087.0	8,023.3	8,600.7	7,614.0	9,273.0	9,295.0	9,250.0
Nat'l Archives & Records Admin .....	.3	.4	.7	.7	.3	.3	.1	.1	.1	.1	.1
National Science Foundation	1,556.7	1,524.9	1,630.6	1,732.7	1,754.2	1,873.0	1,876.0	2,054.0	2,000.0	2,087.0	2,344.0
Nuclear Regulatory Commission	113.2	111.5	107.5	116.5	119.6	92.4	88.8	75.2	67.5	53.5	52.3
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Institution	79.8	90.8	94.0	94.2	96.0	121.2	119.0	121.0	123.0	127.0	134.0
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	61.6	61.8	68.6	98.8	108.6	97.9	93.1	6.1	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-93a. Federal outlays for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
United States Arms Control & Disarmament Agency	2.8	0.2	0.4	2.1	1.5	1.3	1.1	0.7	1.2	0.8	0.8
US Information Agency	1.0	.0	.2	.2	.2	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-94. Federal outlays for R&D plant, by agency: fiscal years 1978-88

[Dollars in millions]

Page 1 of 2

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	1,107.8	1,202.8	1,481.7	1,606.7	1,376.1	1,299.9	1,639.2	1,688.9	1,481.2	1,602.4	1,817.2
Departments:											
Dept of Agriculture, total	18.6	21.7	27.7	39.0	21.3	32.8	29.2	34.3	35.0	71.1	78.5
Agricultural Research Svc	NA	NA	NA	35.8	18.5	30.7	25.0	26.7	32.4	63.3	58.3
Animal & Plant Health											
Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
Cooperative State Research,											
Ed, & Extension Service	NA	NA	NA	.0	.0	.8	3.8	6.9	1.6	7.0	17.5
Forest Service	2.1	3.5	3.6	3.2	2.7	1.3	.4	.7	1.0	.8	2.2
Science & Ed Admin, total	16.5	18.2	24.1	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	16.5	18.2	24.1	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	3.5	1.9	4.8	1.3	1.0	.7	9.2	4.3	7.4	4.2	10.9
Economic Development Admin .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Maritime Administration .....	.3	.5	.6	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of											
Standards & Technology .....	.9	1.4	.3	.5	1.0	.7	9.2	4.3	6.0	2.1	10.1
National Oceanic &											
Atmospheric Administration	2.3	.0	3.9	.8	.0	.0	.0	.0	1.5	2.1	.5
Department of Defense, total	312.6	235.8	204.7	238.5	231.7	267.7	380.1	401.7	280.6	357.3	416.2
Department of the Army	6.8	2.1	7.6	8.9	13.5	21.5	34.4	53.4	55.0	60.7	61.8
Department of the Navy	49.1	52.9	90.9	92.2	125.3	136.7	150.3	143.8	130.7	65.0	78.8
Department of the Air Force	250.1	164.9	103.0	130.0	67.7	103.7	191.2	199.8	89.1	194.3	207.5
Defense Agencies	6.6	15.9	3.2	7.4	25.2	5.8	4.2	4.7	5.8	37.4	68.1
Department of Education	NA	.0	.0	.0	.0	.0	.0	.0	.8	15.8	11.1
Department of Energy	481.3	653.5	962.8	1,084.5	943.3	824.5	916.1	855.3	725.8	721.3	779.0
Dept of Health, Education, &											
Welfare, total	68.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	66.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human											
Services, total	NA	73.4	76.9	42.6	36.8	26.5	34.6	42.6	32.7	31.5	30.7
Alcohol, Drug Abuse, & Mental											
Health Administration	NA	.4	.1	.1	.4	1.0	4.1	1.4	.5	.6	.0
Food & Drug Administration	NA	.6	.7	.5	1.0	2.1	10.0	15.0	10.0	1.9	1.7
National Insts of Health	NA	72.5	76.0	42.0	35.4	23.4	20.5	26.2	22.2	29.0	29.0
Dept of the Interior, total	7.7	9.0	8.7	4.1	1.3	2.4	5.2	4.2	6.1	4.8	5.1
Bonneville Power Admin .....	.0	.0	.0	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Mines .....	.1	4.3	2.4	2.1	.2	.1	.1	.0	.0	.0	.0
Geological Survey .....	.0	.0	.0	.0	.0	1.5	1.1	.9	.9	.8	.8
Office of Surface Mining											
Reclamation & Enforcement .....	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
Office of Water Rsch & Tech .....	.6	.7	.7	.8	.9	.0	.0	NA	NA	NA	NA
US Fish & Wildlife Service	7.0	4.0	5.3	1.0	.3	.8	4.0	3.3	5.2	4.0	4.3
Department of Justice, total .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0
Fed Bureau of Investigation .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-94. Federal outlays for R&D plant, by agency: fiscal years 1978-88

[Dollars in millions]

Page 2 of 2

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of State, total	0.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Agcy for Internat'l Dvlpmt .....	.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dept of Transportation, total	13.2	16.2	16.3	16.2	13.0	9.9	12.9	14.1	15.5	11.2	11.1
Coast Guard .....	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Federal Aviation Admin	1.0	9.5	5.5	6.1	4.3	9.2	12.4	13.6	14.3	10.4	10.5
Federal Highway Admin .....	.4	.2	.3	2.8	.0	.0	.0	.0	.7	.3	.0
Federal Railroad Admin	10.9	6.3	10.3	6.8	8.2	.2	.0	.0	.0	.0	.2
National Highway Traffic Safety Administration .....	.2	.2	.2	.5	.5	.5	.5	.5	.5	.5	.0
Dept of the Treasury, total	-	-	-	.1	.1	.1	.1	.1	.1	.1	.1
US Customs Service	-	-	-	.1	.1	.1	.1	.1	.1	.1	.1
United States Secret Service	NA	NA	.0	.0	.0	.0	.0	.0	.1	-	-
Department of Veterans Affairs	9.7	2.8	4.2	6.5	2.9	10.6	4.6	7.6	3.9	3.7	4.6
Other agencies:											
Consumer Product Safety Comm ...	.3	2.7	2.7	.0	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agcy	2.2	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
General Services Admin .....	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0
International Development											
Cooperation Agency, total	NA	4.5	6.6	6.2	10.3	12.3	11.4	12.8	14.0	14.4	12.6
Agcy for Internat'l Dvlpmt	NA	4.5	6.6	6.2	10.3	12.3	11.4	12.8	14.0	14.4	12.6
Nat'l Aero & Space Admin	124.3	132.7	140.3	146.9	112.2	108.1	191.9	246.8	299.1	313.9	398.7
National Science Foundation	38.0	29.4	17.6	12.7	1.5	2.9	43.0	64.0	57.3	49.9	56.7
Nuclear Regulatory Commission ...	6.2	8.0	7.4	7.3	.0	.0	.0	.0	.0	.0	.0
Smithsonian Institution .....	.1	.6	.4	.4	.4	1.1	.6	.9	1.5	1.6	1.6
Tennessee Valley Authority	21.9	8.2	.6	.4	.2	.4	.2	.3	.6	.4	.5
United States Arms Control & Disarmament Agency .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table C-94a. Federal outlays for R&D plant, by agency: fiscal years 1989-99

[Dollars in millions]

Page 1 of 2

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	2,026.1	2,015.8	2,546.1	2,784.5	3,144.5	2,177.6	2,032.4	1,865.6	1,994.8	1,931.1	2,038.9
Departments:											
Dept of Agriculture, total	92.3	124.2	80.1	136.8	149.5	133.4	128.4	102.6	122.3	163.3	152.6
Agricultural Research Svc	51.7	55.3	49.4	69.4	89.2	75.3	79.1	67.5	70.9	105.5	110.3
Animal & Plant Health											
Inspection Service .....	.3	6.1	.0	.0	.0	.0	.0	1.5	.0	.0	.0
Cooperative State Research,											
Ed, & Extension Svc	38.6	58.0	15.5	60.2	53.8	52.8	45.1	31.1	49.3	55.1	39.7
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
Forest Service	1.7	4.9	15.1	7.2	6.5	4.9	4.3	2.5	2.0	2.7	2.7
Department of Commerce, total	9.1	14.7	15.5	21.3	22.4	12.9	23.5	26.9	70.5	57.5	50.3
Economic Development Admin .....	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
National Institute of											
Standards & Technology	8.5	8.1	8.3	11.4	9.6	12.7	23.0	26.9	48.9	30.6	36.8
National Oceanic &											
Atmospheric Administration .....	.5	6.6	7.3	9.9	12.8	.3	.5	.0	21.6	26.9	13.4
Department of Defense, total	415.6	436.8	433.7	410.9	373.2	261.0	81.0	114.7	52.4	50.5	50.9
Department of the Army	39.7	46.8	65.0	22.0	7.0	3.8	4.2	5.6	4.8	4.3	4.2
Department of the Navy	84.5	101.2	87.0	111.0	73.5	62.9	37.5	26.6	16.9	24.9	31.3
Department of the Air Force	199.7	200.2	218.2	186.3	231.0	153.7	26.9	54.2	25.4	20.9	14.8
Defense Agencies	91.8	88.6	63.5	91.6	61.7	40.6	12.4	28.3	5.3	.4	.6
Department of Education	2.3	2.8	2.6	2.5	12.8	1.9	1.0	.1	.0	5.0	.0
Department of Energy	838.3	856.9	1,099.8	1,198.0	1,483.2	921.8	864.1	809.9	806.7	827.8	888.5
Department of Health & Human											
Services, total	56.0	55.1	194.8	96.7	149.3	134.2	267.0	140.5	120.5	214.0	288.2
Food & Drug Administration	2.0	1.0	18.4	14.3	19.7	21.9	16.7	5.5	8.7	29.4	20.0
Hlth Resources & Svcs Admin .....	.0	.0	.0	.3	1.4	1.4	1.6	.7	.7	.7	.7
National Insts of Health ¹	54.0	54.1	176.4	82.1	128.2	110.9	248.8	134.3	111.1	183.9	267.5
Social Security Admin .....	.0	.0	-	.0	.0	.0	.0	NA	NA	NA	NA
Dept of the Interior, total	6.8	10.5	20.7	17.8	20.8	7.5	6.5	2.1	6.6	2.5	2.3
Bureau of Mines	2.1	3.0	1.5	.0	.0	.0	.0	NA	NA	NA	NA
Geological Survey	1.4	1.3	2.9	4.4	4.0	6.3	5.3	1.1	4.8	1.2	1.2
Minerals Management Service .....	.0	.2	.2	.7	1.0	1.1	1.0	1.0	1.8	1.2	1.1
Nat'l Biological Svc	NA	NA	NA	NA	.0	.1	.3	NA	NA	NA	NA
US Fish & Wildlife Service	3.4	6.0	16.1	12.7	15.8	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

Table C-94a. Federal outlays for R&D plant, by agency: fiscal years 1989-99

[Dollars in millions]

Page 2 of 2

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	12.9	16.7	18.4	17.1	30.0	17.0	26.7	14.2	20.8	17.5	19.8
Coast Guard .....	.0	.4	.4	.4	.5	.5	.5	.5	.3	.3	.3
Federal Aviation Admin	12.6	16.3	16.5	15.9	25.6	11.7	14.0	6.0	18.0	15.0	14.3
Federal Highway Admin .....	.0	.0	.0	.0	.4	3.8	10.9	6.1	2.5	1.3	4.7
Federal Railroad Admin .....	.3	-	1.5	.8	1.3	1.0	1.3	1.6	.0	.9	.6
Federal Transit Admin .....	.0	.0	.0	.0	2.2	.0	.0	.0	.0	.0	.0
Dept of the Treasury, total .....	.1	.1	.1	.1	.2	1.9	.2	.2	.1	.1	.1
Bureau of Engraving & Printing .....	.0	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0
US Customs Service ² .....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
US Secret Service	-	-	-	-	-	-	-	-	.0	.0	.0
Department of Veterans Affairs	1.5	12.4	8.2	5.5	4.8	5.2	7.2	8.5	8.3	7.8	8.5
Other agencies:											
Environmental Protection Agcy .....	.0	.0	.0	.0	2.5	4.8	3.0	.0	22.0	27.0	20.0
General Services Admin .....	.0	.0	3.6	20.9	7.6	5.5	1.3	4.1	1.6	.1	.8
Nat'l Aero & Space Admin ³	531.3	437.9	603.8	770.2	798.4	553.5	515.4	480.0	442.0	310.0	326.0
National Science Foundation	56.7	38.1	56.5	80.9	87.5	110.6	101.0	158.0	318.0	244.0	227.0
Smithsonian Institution	2.8	4.6	4.5	1.2	1.2	6.2	6.0	4.0	3.0	4.0	4.0
Tennessee Valley Authority ⁴ .....	.2	4.9	3.7	4.6	1.0	.0	.0	.0	.0	.0	.0

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁴ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-95. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	27,140.8	29,620.6	31,386.1	34,589.6	37,822.4	40,009.0	44,012.1	50,180.4	52,951.2	57,099.7	58,826.5
Departments:											
Dept of Agriculture, total	645.9	685.7	744.5	794.7	818.7	881.5	905.4	983.6	1,007.9	1,059.6	1,151.8
Agricultural Cooperative Svc	NA	NA	1.6	1.7	1.7	2.1	2.2	2.9	2.6	2.7	2.7
Agricultural Marketing Svc .....	.0	1.0	1.3	1.1	1.2	1.4	1.5	1.7	1.6	1.5	1.6
Agricultural Research Svc	NA	NA	NA	411.6	426.0	466.8	480.1	498.7	532.6	522.4	561.2
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	6.2
Cooperative State Research, Ed. & Extension Service	NA	NA	NA	199.4	219.0	242.3	245.7	294.3	278.6	338.3	374.7
Economic Research Service	NA	NA	NA	39.3	39.3	38.8	43.7	46.4	44.6	44.8	48.1
Economics, Stat. & Coop Svc	32.7	35.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	31.1	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	108.3	111.0	115.2	129.3	112.5	108.1	108.8	114.8	114.0	127.1	138.4
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.9	1.0	1.2	1.0
Human Nutrition Info Svc	NA	NA	NA	.0	8.5	8.2	6.0	6.7	12.8	6.8	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	7.0	7.6	8.2	8.4	8.0	3.4	3.6
Office of International Cooperation & Development ...	NA	.0	5.3	3.9	2.6	5.3	8.2	7.7	7.0	5.6	5.0
Office of Transportation	NA	.7	.8	.9	.9	.8	1.0	1.2	1.0	1.1	1.1
Science & Ed Admin, total	505.0	537.5	589.3	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	347.5	365.0	405.0	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	157.4	172.6	184.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	287.7	311.8	347.2	329.3	337.3	335.7	367.6	403.0	408.4	407.5	400.2
Bureau of the Census	3.4	3.1	3.2	3.9	3.8	4.3	4.4	4.9	4.7	4.7	5.7
Economic Development Admin ...	38.5	43.1	32.3	28.1	9.6	5.3	5.1	13.0	10.3	5.0	4.2
Maritime Administration	20.6	20.5	19.9	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	59.1	69.3	76.4	83.0	89.9	95.7	104.9	104.7	108.5	100.7	118.7
National Oceanic & Atmospheric Administration	163.7	171.2	203.6	202.2	222.0	222.0	244.3	269.8	276.2	289.3	263.5
National Telecommunications & Information Administration	1.8	4.1	10.7	10.9	11.3	8.3	8.7	9.1	8.4	7.8	8.1
Office of the Secretary .....	.0	.1	.6	.0	-	-	.1	1.4	.3	-	.0
Patent & Trademark Office .....	.5	.5	.5	1.1	.7	.0	.0	.0	.0	.0	.0
Department of Defense, total	11,786.2	12,776.4	14,189.2	16,786.3	20,913.1	23,305.3	25,902.1	30,322.4	33,224.1	35,708.7	35,684.6
Department of the Army	2,556.5	2,772.5	2,993.8	3,257.0	3,785.2	4,024.4	4,281.7	4,623.7	4,863.3	5,085.2	4,898.8
Department of the Navy	4,046.7	4,403.1	4,789.3	5,103.9	6,001.0	6,209.9	7,779.0	9,309.5	9,747.9	9,576.8	9,588.9
Department of the Air Force	4,422.4	4,693.1	5,319.0	7,128.8	9,442.6	10,951.3	12,377.0	13,552.2	13,723.9	15,618.0	15,011.0
Defense Agencies	724.5	878.4	1,049.2	1,255.6	1,643.3	2,058.1	1,405.7	2,786.3	4,771.9	5,291.8	5,957.3
Def Civil Preparedness Agcy	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Operational Test & Evaluation, Director	NA	NA	NA	NA	NA	NA	NA	NA	.0	8.4	68.2
Test & Evaluation, Deputy Under Secretary of Defense	28.6	29.3	37.9	41.1	41.0	61.6	58.6	50.6	117.1	128.5	160.3

See explanatory information, if any, and SOURCE at end of table.

**Table C-95. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Education	NA	166.3	139.4	.0	128.0	111.7	115.7	126.0	127.9	153.5	145.9
Department of Energy	4,935.5	5,483.2	5,777.8	5,896.4	5,622.2	5,294.4	5,526.0	5,834.4	5,430.6	5,529.4	5,951.4
Dept of Health, Education, & Welfare, total	3,281.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	180.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	60.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	65.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	19.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	18.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	89.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	2,654.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	36.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	32.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	75.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	12.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	3,558.4	3,810.8	3,950.9	3,965.4	4,400.4	4,861.8	5,493.2	5,695.5	6,643.0	7,177.6
Alcohol, Drug Abuse, & Mental Health Administration	NA	214.4	233.5	239.7	251.4	304.0	337.5	377.9	396.6	476.1	554.8
Centers for Disease Control & Prevention	NA	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7
Food & Drug Administration	NA	66.7	76.6	72.6	75.0	102.7	80.8	95.1	87.4	85.8	91.5
Health Care Financing Admin	NA	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2
Health Resources Admin	NA	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	10.1	13.3	18.5	19.7	12.3	9.3	10.0
Health Services Admin	NA	28.7	26.7	20.3	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	57.1	49.3	73.7	27.2	23.4	18.3	24.3	54.6	53.0	54.0
National Insts of Health	NA	3,000.8	3,211.2	3,355.5	3,452.6	3,806.8	4,285.2	4,856.5	5,034.5	5,886.2	6,309.9
Office of the Assistant Secretary for Health	NA	34.6	29.9	33.1	16.1	16.6	18.1	18.6	17.3	21.2	21.0
Office of the Secretary	NA	24.7	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7
Social Security Admin	NA	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7
Dept of Housing & Urban Dvlpmnt ...	69.7	67.9	56.0	48.1	28.9	32.1	18.2	18.5	15.3	16.3	18.4
Dept of the Interior, total	374.0	410.8	418.8	430.6	382.4	384.9	416.1	395.9	389.6	415.7	426.1
Bonneville Power Admin .....	.0	.0	.0	14.4	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.2	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.7	3.7
Bureau of Mines	121.1	121.3	114.4	97.4	94.8	88.6	108.8	89.9	84.4	88.8	91.3
Bureau of Reclamation	11.2	12.2	14.1	14.3	10.1	10.0	10.4	13.2	10.2	10.7	4.4
Geological Survey	133.7	145.6	146.3	169.8	152.6	158.4	209.9	215.7	219.5	227.6	236.9
Minerals Management Service ...	NA	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary	1.7	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.4
Office of Surface Mining Reclamation & Enforcement ...	2.2	5.0	7.8	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	28.0	28.0	30.0	21.8	12.3	2.2	3.6	NA	NA	NA	NA
US Fish & Wildlife Service	67.2	87.1	94.1	93.3	94.2	97.7	63.3	52.4	50.5	64.3	67.8
Department of Justice, total	60.9	43.0	41.5	26.5	26.7	31.4	24.5	36.0	36.5	53.5	43.1
Bureau of Prisons	3.6	3.4	2.1	2.5	1.7	1.7	1.6	1.5	3.0	7.1	6.0
Drug Enforcement Admin	1.9	2.4	2.7	1.3	3.2	2.5	1.9	1.6	2.5	2.2	2.5
Fed Bureau of Investigation	1.8	3.1	1.4	.7	2.7	2.5	1.0	9.5	7.2	19.1	12.7
Immigration & Naturalization Service .....	.4	.2	.3	.1	.6	.6	.6	.4	.4	.4	.3
Office of Justice Programs	51.6	32.2	33.2	21.0	18.0	23.8	19.5	22.7	23.2	24.6	21.5
Office of Legal Policy	1.6	1.7	1.8	.8	.4	.3	.0	.3	.2	.1	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-95. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 3 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	97.8	137.0	138.1	62.2	25.4	19.9	16.3	13.3	10.4	21.6	35.6
Bureau of Labor Statistics	1.2	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.7	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1
Employment & Training Admin ...	86.6	120.8	121.7	52.4	16.1	9.0	6.1	3.5	3.5	5.7	14.9
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.8	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.4	1.1	.9	1.5	1.9	2.6	2.1	2.7	6.1
Pension Benefit Guaranty Corp ..	NA	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3
Pension & Welfare Benefits Administration	NA	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7
Department of State, total	85.4	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2
Agcy for Internat'l Dvlpmt	82.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.8	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	422.4	392.7	384.5	434.5	322.0	369.6	465.2	437.9	397.5	336.2	318.5
Coast Guard	24.4	21.1	18.0	26.3	20.0	19.6	19.5	19.0	16.9	17.0	21.4
Federal Aviation Admin	111.5	120.4	108.8	128.9	99.4	147.6	282.6	294.8	271.5	177.7	173.8
Federal Highway Admin	52.1	53.5	58.3	51.2	40.3	50.4	46.4	49.0	46.1	76.9	74.1
Federal Railroad Admin	65.7	56.1	56.4	46.1	24.5	16.5	19.2	15.0	15.4	11.2	10.4
Federal Transit Admin	69.6	58.0	54.4	78.2	61.4	57.0	20.1	10.2	8.2	12.6	2.3
Maritime Administration	NA	NA	NA	14.2	11.1	15.0	9.9	13.9	9.4	5.8	.5
National Highway Traffic Safety Administration	66.5	56.8	63.8	66.4	55.9	52.5	57.4	28.6	22.9	28.4	28.3
Office of the Secretary	31.7	11.7	10.8	10.1	3.3	4.9	4.9	4.8	5.1	4.5	5.7
Research & Special Programs Administration .....	.9	15.0	14.0	13.1	6.1	6.2	5.2	2.7	2.0	2.1	2.1
Dept of the Treasury, total	9.9	9.6	12.1	11.4	13.4	15.6	13.9	24.4	24.2	27.0	26.2
Bureau of Alcohol, Tobacco, & Firearms	2.0	2.5	1.6	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	3.7	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0
Internal Revenue Service	2.4	3.6	4.0	4.2	5.4	8.0	8.2	15.9	14.2	14.6	14.4
US Customs Service	1.8	1.4	3.9	3.5	3.2	3.4	1.9	2.3	4.9	7.1	9.3
United States Mint .....	.0	.0	.0	.0	.0	.0	.0	.6	.3	.2	.1
United States Secret Service	NA	NA	.4	.6	.0	.3	.2	.6	.5	.5	.4
Department of Veterans Affairs	118.1	132.1	137.8	159.2	140.1	171.9	196.4	229.9	191.0	215.4	234.8
Other agencies:											
ACTION	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on Intergovernmental Relations	1.7	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8
Appalachian Regional Comm .....	.5	.9	.8	.4	.4	.2	.5	.2	.2	.1	.2
Community Services Admin	24.3	20.7	30.3	18.3	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	4.1	6.6	6.2	.5	.2	.5	1.3	2.4	2.0	2.2	1.1
Environmental Protection Agcy	389.3	412.5	345.0	325.7	335.1	240.7	261.2	320.4	317.3	348.2	347.4
Fed Communications Comm	2.4	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2
Federal Emergency Management Agency, total	7.0	12.6	11.8	11.6	9.2	3.3	11.5	4.1	.0	.0	.0
National Fire Prevention & Control Administration	7.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.5	3.0	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4
Foundation for Ed Assistance	NA	NA	NA	104.9	NA	NA	NA	NA	NA	NA	NA
General Services Admin	2.7	.5	.2	.6	1.0	.5	2.4	.4	20.0	1.6	2.3
International Development Cooperation Agency, total	NA	112.9	155.6	142.2	205.9	232.0	245.0	227.2	258.7	224.3	210.6
Agcy for Internat'l Dvlpmt	NA	112.9	155.6	142.2	205.9	232.0	245.0	227.2	258.7	224.3	210.6
Interstate Commerce Comm .....	.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-95. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Library of Congress	4.9	5.9	6.9	4.9	5.7	7.4	7.5	7.1	6.6	6.5	7.1
Nat'l Aero & Space Admin	3,495.6	3,725.9	3,393.2	3,708.9	3,191.6	2,762.3	3,066.1	3,561.5	3,694.8	4,096.5	4,758.6
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7
National Science Foundation	788.5	838.1	900.5	976.2	976.8	1,065.2	1,248.0	1,419.1	1,406.5	1,531.8	1,589.6
Nuclear Regulatory Commission	140.8	157.4	190.4	227.3	220.3	207.3	190.7	150.0	123.8	122.5	108.5
Office of Personnel Management ...	4.5	6.0	6.8	8.4	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Smithsonian Institution	35.1	37.9	41.9	45.3	52.9	57.0	63.8	72.7	64.0	74.4	75.8
Tennessee Valley Authority	53.4	89.2	80.7	69.3	85.3	63.3	68.3	80.0	78.3	78.2	87.7
United States Arms Control & Disarmament Agency	3.6	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	4.6	3.4
US Information Agency .....	.1	.1	.1	1.5	.1	-	1.4	.1	2.0	3.5	.4
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-95a. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	63,571.6	65,831.2	64,148.0	68,577.2	70,414.7	69,450.8	70,442.9	69,401.2	71,744.6	74,202.9	75,330.5
Departments:											
Dept of Agriculture, total	1,127.5	1,210.6	1,381.3	1,491.8	1,470.2	1,525.6	1,523.6	1,428.7	1,572.8	1,549.1	1,529.0
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.5	2.7	4.2	4.7	4.7	4.8	4.8	4.9	4.8	4.7	4.8
Agricultural Research Svc	578.7	589.9	655.7	725.2	705.5	757.0	751.0	743.1	806.6	822.7	851.9
Animal & Plant Health											
Inspection Service	7.7	14.0	15.7	16.7	17.1	19.2	19.1	19.5	19.8	19.5	19.0
Cooperative State Research,											
Ed. & Extension Svc	339.4	371.1	438.3	481.2	479.2	471.6	489.0	418.9	496.7	429.6	395.7
Economic Research Service	49.5	50.5	54.4	58.9	58.9	55.2	53.8	53.0	53.0	71.6	55.8
Food Safety Inspection Svc .....	.0	.0	.0	.0	.0	.0	.0	-	-	-	-
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	1.1	.9	1.3	1.4	1.4	1.4
Forest Service	133.0	163.5	193.1	184.3	186.3	198.0	197.8	180.4	181.8	190.7	190.7
Grain Inspection Packers &											
Stockyards Administration	1.1	.6	.7	1.5	1.8	1.8	1.5	2.5	2.8	2.8	2.8
Human Nutrition Info Svc	8.4	9.0	9.9	10.7	8.4	7.0	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	2.9	2.8	3.2	3.6	3.9	3.9	4.0	3.8	3.4	3.5	3.4
Office of International											
Cooperation & Dvlpmnt	2.5	3.6	3.1	1.5	1.5	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	407.0	453.5	505.4	672.2	681.7	857.3	1,213.7	1,152.0	1,046.5	1,109.1	1,105.7
Bureau of the Census	4.9	6.9	6.6	5.3	5.4	4.8	4.9	6.3	5.1	5.5	9.1
Economic Development Admin	1.0	1.2	1.4	.5	.0	.6	.5	.6	.6	.6	.6
National Institute of											
Standards & Technology	124.2	131.0	148.4	190.2	219.8	284.1	640.5	601.0	482.1	506.8	540.7
National Oceanic &											
Atmospheric Administration	269.1	306.7	345.3	472.2	452.4	562.9	561.4	528.5	530.9	570.1	529.6
National Telecommunications &											
Information Administration	7.8	7.7	3.6	4.0	4.2	4.8	6.4	15.7	27.8	26.2	25.8
Office of the Secretary .....	.0	.0	.0	.0	.0	.0	-	-	.0	.0	.0
Department of Defense, total	38,076.2	37,755.5	32,560.5	36,526.0	36,220.7	34,818.9	33,856.8	34,582.2	34,873.8	34,927.5	34,426.5
Department of the Army	5,704.5	5,737.2	6,172.5	6,876.2	6,227.2	5,576.2	5,424.7	4,879.7	4,825.2	5,156.6	4,838.3
Department of the Navy	9,755.7	9,646.6	7,860.0	8,126.8	9,148.3	9,005.1	8,974.5	8,614.4	8,252.5	8,107.4	8,307.7
Department of the Air Force	15,487.6	15,153.6	11,089.8	13,606.8	12,866.9	12,626.8	11,835.7	13,066.5	13,990.6	13,900.3	13,678.2
Defense Agencies	6,973.3	6,996.8	7,200.9	7,670.5	7,723.3	7,367.8	7,369.1	7,742.0	7,509.1	7,500.9	7,326.0
Operational Test &											
Evaluation, Director	14.4	32.6	13.6	12.4	12.3	11.2	21.7	21.9	26.6	27.8	25.3
Test & Evaluation, Deputy											
Under Secretary of Defense	140.7	188.7	223.7	233.2	242.5	231.8	231.0	257.7	269.7	234.6	251.0
Department of Education	161.0	178.8	175.2	170.9	179.9	178.4	179.4	173.7	181.2	211.8	262.7
Department of Energy	6,065.6	6,546.6	7,203.2	7,493.0	7,723.7	6,959.8	6,890.0	6,050.8	6,332.8	6,592.4	7,477.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-95a. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Department of Health & Human Services, total	7,981.4	8,513.4	9,842.3	9,084.6	10,498.5	11,141.7	11,711.0	12,086.2	13,048.0	14,134.5	15,074.8
Administration on Aging	NA	NA	20.6	20.2	20.9	19.1	20.7	3.7	4.4	10.4	10.4
Administration for Children & Families	NA	NA	129.0	39.2	19.9	11.3	12.0	12.6	17.4	20.1	32.9
Agency for Health Care Policy & Research	NA	49.7	101.1	106.3	114.8	154.4	135.3	125.2	144.0	146.5	171.4
Alcohol, Drug Abuse, & Mental Health Administration ¹	695.7	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	323.0	358.5	365.2
Food & Drug Administration	122.0	122.0	143.5	150.0	174.2	177.8	175.8	176.4	173.1	180.4	174.5
Health Care Financing Admin	49.1	49.1	69.1	75.5	68.2	80.0	74.5	52.7	43.6	50.0	50.0
Hlth Resources & Svcs Admin	10.5	11.9	11.0	10.5	11.0	17.8	14.8	11.8	13.8	14.2	14.4
Human Development Svcs	101.7	95.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	6,833.8	7,221.3	7,763.4	8,491.4	9,893.3	10,439.9	10,930.6	11,377.9	12,237.9	13,261.6	14,163.0
Office of the Assistant Secretary for Health	27.2	6.9	10.0	6.7	1.2	.8	.3	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	8.0	11.7	9.1	12.7	21.7	16.8	16.9
Office of the Assistant Sec, Planning & Eval	NA	NA	NA	NA	NA	NA	NA	9.0	18.4	14.0	14.0
Office of Public Health & Science	NA	NA	NA	NA	NA	NA	NA	3.7	3.3	2.8	2.9
Social Security Admin	15.8	13.9	11.9	33.0	24.5	22.2	20.4	NA	NA	NA	NA
Substance Abuse & Mental Health Services Admin	NA	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0
Dept of Housing & Urban Dvlpmnt ...	18.0	19.3	27.8	25.1	23.6	39.6	41.8	33.1	33.5	39.6	50.5
Dept of the Interior, total	479.8	522.6	615.1	627.6	642.2	703.1	568.3	569.5	587.1	615.4	640.0
Bureau of Land Management	3.0	2.8	8.8	6.3	8.9	.0	.0	.0	.0	.0	.0
Bureau of Mines	101.2	102.3	108.2	107.1	111.9	107.9	.0	NA	NA	NA	NA
Bureau of Reclamation	4.2	5.8	8.7	13.2	10.3	7.4	8.0	6.5	7.1	9.0	10.2
Geological Survey	281.1	309.7	359.8	365.7	360.4	377.4	367.4	520.1	531.2	546.5	567.4
Minerals Management Service ...	2.2	2.0	2.9	4.8	6.9	21.8	21.0	22.6	22.8	26.4	28.5
Nat'l Biological Svc	NA	NA	NA	NA	.0	164.2	152.1	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	38.1	24.2	19.7	20.2	26.0	33.5	34.0
Office of the Secretary .....	.4	.2	.6	.9	.4	.1	-	.0	.0	.0	.0
Office of Surface Mining Reclamation & Enforcement ...	.7	.7	1.0	.3	.5	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	67.5	78.9	97.6	98.2	104.8	.0	.0	.0	.0	.0	.0
Department of Justice, total	38.2	40.5	48.9	48.0	48.9	45.0	57.9	77.3	84.7	102.9	97.9
Bureau of Prisons	5.1	4.5	5.2	5.9	6.1	5.4	5.7	5.2	4.6	6.0	6.2
Drug Enforcement Admin ²	2.7	2.4	2.7	1.4	.9	.9	.4	1.2	-	-	-
Fed Bureau of Investigation	7.7	8.2	10.8	10.9	11.3	7.0	10.9	33.5	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.1	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	22.5	25.0	29.8	29.4	30.2	31.4	40.5	37.2	44.2	60.7	55.5
Department of Labor, total	35.4	73.0	44.0	51.7	55.0	59.7	55.4	52.4	35.1	46.8	69.4
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	6.9	7.1	14.8	13.3	12.6	12.4	12.4
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	15.7	53.4	22.1	31.7	35.9	40.0	25.6	26.9	14.1	27.1	49.4
Labor-Management Relations & Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	4.5	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.5	4.6
Office of the Secretary	6.1	7.1	8.7	5.9	5.8	5.3	6.3	2.6	.2	.2	.2
Pension Benefit Guaranty Corp ..	.3	.5	.5	.9	1.3	1.3	.8	.7	.7	.7	.7
Pension & Welfare Benefits Administration	1.4	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	4.7	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	1.0	1.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-95a. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	318.9	388.3	398.3	470.3	577.6	661.7	755.8	584.3	545.9	683.4	792.8
Coast Guard	17.9	20.6	25.9	20.5	33.4	22.8	20.2	20.5	23.3	22.8	19.5
Federal Aviation Admin	162.3	237.5	236.4	260.2	271.3	318.6	310.1	228.9	226.3	221.5	304.3
Federal Highway Admin	91.0	91.5	86.9	131.0	175.7	242.0	315.6	247.3	211.2	344.2	369.9
Federal Railroad Admin	9.0	10.2	17.6	22.8	26.8	20.6	30.1	30.1	19.5	20.8	20.8
Federal Transit Admin	1.4	1.6	1.7	1.7	31.3	19.9	28.7	13.7	17.0	16.5	16.2
Maritime Administration .....	.0	.9	1.7	1.8	1.7	1.7	2.5	.0	.0	.0	.0
National Highway Traffic Safety Administration	29.7	16.9	21.4	25.8	31.6	25.3	39.7	33.2	36.4	42.4	51.4
Office of the Secretary	5.5	6.8	4.3	4.1	4.5	5.4	3.9	2.8	3.5	4.1	3.5
Research & Special Programs Administration	2.0	2.4	2.4	2.5	1.3	5.3	5.0	7.7	8.7	11.1	7.2
Dept of the Treasury, total	25.7	25.7	31.0	24.8	16.8	19.1	61.5	60.2	59.8	74.4	75.4
Bureau of Engraving & Printing	1.7	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	1.9	1.9
Financial Crimes Enforcement Network .....	.0	.0	2.3	1.2	1.5	.0	.0	.0	.0	.0	.0
Internal Revenue Svc	14.4	16.8	17.9	17.9	6.5	11.3	49.7	51.2	50.8	61.7	62.9
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴	6.9	6.3	3.8	2.3	4.1	4.6	8.6	6.3	6.3	8.9	8.9
United States Mint	2.0	.1	.1	.0	.1	.5	.3	.0	-	.5	.2
US Secret Service .....	.6	.5	.4	.6	.6	.5	.6	.5	.4	.6	.8
Department of Veterans Affairs	245.7	241.0	220.0	229.6	239.5	259.7	245.1	259.9	284.0	300.5	301.2
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.1	1.5	1.7	1.7	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm	1.3	1.1	1.3	1.1	1.2	.3	.4	-	.1	.2	.2
Environmental Protection Agcy	380.3	419.7	432.6	483.9	497.8	558.3	556.3	464.3	517.2	637.0	631.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	19.5	22.6	6.5	1.0	.3	5.1	.1	-	-	-
International Development Cooperation Agency, total	279.1	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	183.9	184.2
Agency for International Development ⁵	279.1	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	183.9	184.2
Library of Congress	8.0	8.4	9.0	10.3	10.5	10.0	10.2	10.6	2.8	2.5	2.7
Nat'l Aero & Space Admin ⁶	5,913.0	7,060.3	8,003.8	8,475.4	8,769.2	8,811.5	9,639.7	8,987.5	9,649.2	10,162.7	9,502.0
Nat'l Archives & Records Admin .....	.3	.4	.7	.7	.3	.3	.1	.1	.1	.1	.1
National Science Foundation	1,724.0	1,728.8	1,944.8	1,970.0	2,012.3	2,212.2	2,438.9	2,375.5	2,452.3	2,567.5	2,857.0
Nuclear Regulatory Commission	114.8	108.8	108.8	119.0	119.8	90.7	88.2	70.9	62.1	50.7	52.8
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Institution	83.6	88.8	99.5	101.8	107.0	129.2	129.0	132.0	134.0	138.5	146.5
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	62.8	69.8	73.1	100.5	109.6	97.9	93.1	6.1	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-95a. Federal obligations for research and development and for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
United States Arms Control & Disarmament Agency	2.8	0.2	0.4	2.1	1.5	1.3	1.1	0.7	1.2	0.8	0.8
US Information Agency .....	.1	.5	.1	.0	1.1	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-96. Federal obligations for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	25,845.1	28,145.1	29,830.4	33,103.9	36,432.6	38,711.5	42,224.9	48,359.6	51,412.4	55,253.7	56,769.4
Departments:											
Dept of Agriculture, total	621.3	663.0	687.6	774.0	797.3	847.6	866.2	943.0	928.5	947.9	1,016.6
Agricultural Cooperative Svc	NA	NA	1.6	1.7	1.7	2.1	2.2	2.9	2.6	2.7	2.7
Agricultural Marketing Svc .....	.0	1.0	1.3	1.1	1.2	1.4	1.5	1.7	1.6	1.5	1.6
Agricultural Research Svc	NA	NA	NA	394.1	404.9	443.4	451.3	469.7	463.4	478.6	505.7
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6
Cooperative State Research, Ed. & Extension Service	NA	NA	NA	199.4	219.0	232.3	235.7	284.3	269.0	270.7	298.4
Economic Research Service	NA	NA	NA	39.3	39.3	38.8	43.7	46.4	44.6	44.8	48.1
Economics, Stat. & Coop Svc	32.7	35.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	31.1	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	105.6	107.5	111.5	126.1	112.1	107.7	108.4	113.1	113.3	126.7	135.5
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.9	1.0	1.2	1.0
Human Nutrition Info Svc	NA	NA	NA	.0	8.5	8.2	6.0	6.7	12.8	6.8	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	7.0	7.6	8.2	8.4	8.0	3.4	3.6
Office of International Cooperation & Development ...	NA	.0	5.3	3.9	2.6	5.3	8.2	7.7	7.0	5.6	5.0
Office of Transportation	NA	.7	.8	.9	.9	.8	1.0	1.2	1.0	1.1	1.1
Science & Ed Admin, total	483.0	518.4	536.0	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	325.5	345.8	351.8	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	157.4	172.6	184.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	283.7	309.4	342.5	327.9	336.3	335.0	358.2	398.8	399.2	402.2	388.9
Bureau of the Census	3.4	3.1	3.2	3.9	3.8	4.3	4.4	4.9	4.7	4.7	5.7
Economic Development Admin ...	38.5	43.1	32.3	28.1	9.6	5.3	5.1	13.0	10.3	5.0	4.2
Maritime Administration	19.6	19.6	19.4	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	58.3	67.8	76.2	82.5	88.8	95.0	95.5	100.5	100.8	98.6	107.9
National Oceanic & Atmospheric Administration	161.5	171.2	199.8	201.4	222.0	222.0	244.3	269.8	274.7	286.1	263.0
National Telecommunications & Information Administration	1.8	4.1	10.7	10.9	11.3	8.3	8.7	9.1	8.4	7.8	8.1
Office of the Secretary .....	.0	.1	.6	.0	-	-	.1	1.4	.3	-	.0
Patent & Trademark Office .....	.5	.5	.5	1.1	.7	.0	.0	.0	.0	.0	.0
Department of Defense, total	11,553.6	12,506.2	13,981.0	16,508.6	20,622.6	22,992.8	25,372.9	29,791.5	32,937.9	35,231.5	35,248.9
Department of the Army	2,548.9	2,768.7	2,980.0	3,244.2	3,760.5	3,998.1	4,225.5	4,570.8	4,809.4	5,019.5	4,806.0
Department of the Navy	3,998.4	4,335.0	4,706.1	5,006.0	5,845.1	6,068.2	7,605.6	9,127.4	9,650.3	9,507.8	9,514.1
Department of the Air Force	4,262.3	4,525.6	5,211.0	6,969.2	9,357.9	10,812.6	12,091.6	13,260.9	13,593.8	15,347.7	14,867.3
Defense Agencies	707.9	847.6	1,046.0	1,248.2	1,618.1	2,052.3	1,391.5	2,781.7	4,767.4	5,219.7	5,832.9
Def Civil Preparedness Agcy	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Operational Test & Evaluation, Director	NA	NA	NA	NA	NA	NA	NA	NA	.0	8.4	68.2
Test & Evaluation, Deputy Under Secretary of Defense	28.6	29.3	37.9	41.1	41.0	61.6	58.6	50.6	117.1	128.5	160.3

See explanatory information, if any, and SOURCE at end of table.

**Table C-96. Federal obligations for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Education	NA	166.3	139.4	.0	128.0	111.7	115.7	124.9	121.3	132.5	140.7
Department of Energy	4,244.8	4,638.8	4,753.7	4,918.2	4,708.2	4,536.7	4,673.6	4,966.0	4,688.3	4,757.2	5,036.4
Dept of Health, Education, & Welfare, total	3,207.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	180.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	60.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	64.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	19.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	18.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	89.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	2,580.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	36.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	32.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	75.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	12.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	3,504.9	3,780.2	3,927.1	3,940.7	4,352.5	4,830.7	5,451.0	5,657.6	6,606.3	7,158.0
Alcohol, Drug Abuse, & Mental Health Administration	NA	214.3	233.5	239.4	248.1	302.2	337.2	377.6	396.1	475.5	554.8
Centers for Disease Control & Prevention	NA	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7
Food & Drug Administration	NA	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0
Health Care Financing Admin	NA	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2
Health Resources Admin	NA	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	10.1	13.3	18.5	19.7	12.3	9.3	10.0
Health Services Admin	NA	28.7	26.7	20.3	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	57.1	49.3	73.7	27.2	23.4	18.3	24.3	54.6	53.0	54.0
National Insts of Health	NA	2,953.1	3,181.8	3,333.2	3,433.1	3,789.2	4,257.4	4,827.7	5,005.1	5,850.9	6,290.9
Office of the Assistant Secretary for Health	NA	34.6	29.9	33.1	16.1	16.6	18.1	18.6	17.3	21.2	21.0
Office of the Secretary	NA	24.7	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7
Social Security Admin	NA	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7
Dept of Housing & Urban Dvlpmnt ...	69.7	67.9	56.0	48.1	28.9	32.1	18.2	18.5	15.3	16.3	18.4
Dept of the Interior, total	359.0	405.8	411.3	427.1	381.1	382.5	410.9	391.7	385.2	403.8	416.8
Bonneville Power Admin .....	.0	.0	.0	14.2	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.2	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.7	3.7
Bureau of Mines	114.0	121.0	113.4	96.7	94.7	88.5	108.8	89.9	84.4	88.8	91.3
Bureau of Reclamation	11.2	12.2	14.1	14.3	10.1	10.0	10.4	13.2	10.2	10.7	4.4
Geological Survey	133.7	145.6	146.3	169.8	152.6	157.0	208.9	214.9	218.6	226.8	236.1
Minerals Management Service ...	NA	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary	1.7	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.4
Office of Surface Mining Reclamation & Enforcement ...	2.2	5.0	7.5	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	27.4	27.2	29.3	21.1	11.4	2.2	3.6	NA	NA	NA	NA
US Fish & Wildlife Service	59.9	83.1	88.6	91.5	93.9	96.7	59.1	49.0	47.0	53.3	59.2
Department of Justice, total	60.9	43.0	41.5	26.5	26.7	31.4	24.5	36.0	36.5	42.4	43.1
Bureau of Prisons	3.6	3.4	2.1	2.5	1.7	1.7	1.6	1.5	3.0	7.1	6.0
Drug Enforcement Admin	1.9	2.4	2.7	1.3	3.2	2.5	1.9	1.6	2.5	2.2	2.5
Fed Bureau of Investigation	1.8	3.1	1.4	.7	2.7	2.5	1.0	9.5	7.2	8.0	12.7
Immigration & Naturalization Service .....	.4	.2	.3	.1	.6	.6	.6	.4	.4	.4	.3
Office of Justice Programs	51.6	32.2	33.2	21.0	18.0	23.8	19.5	22.7	23.2	24.6	21.5
Office of Legal Policy	1.6	1.7	1.8	.8	.4	.3	.0	.3	.2	.1	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-96. Federal obligations for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 3 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	97.8	137.0	138.1	62.2	25.4	19.9	16.3	13.3	10.4	21.6	35.6
Bureau of Labor Statistics	1.2	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.7	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1
Employment & Training Admin ...	86.6	120.8	121.7	52.4	16.1	9.0	6.1	3.5	3.5	5.7	14.9
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.8	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.4	1.1	.9	1.5	1.9	2.6	2.1	2.7	6.1
Pension Benefit Guaranty Corp ..	NA	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3
Pension & Welfare Benefits											
Administration	NA	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7
Department of State, total	85.2	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2
Agcy for Internat'l Dvlpmt	82.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.8	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	408.3	370.1	361.2	415.5	310.1	347.7	448.3	428.9	385.5	325.0	304.6
Coast Guard	23.7	21.1	18.0	26.3	20.0	19.6	19.5	19.0	16.9	17.0	21.1
Federal Aviation Admin	110.5	110.5	103.1	120.0	94.3	126.2	266.2	286.3	260.6	167.3	160.5
Federal Highway Admin	51.7	52.9	51.1	51.2	40.3	50.4	46.4	49.0	45.5	76.7	74.1
Federal Railroad Admin	53.9	44.2	46.2	36.6	18.2	16.5	19.2	15.0	15.4	11.2	10.0
Federal Transit Admin	69.6	58.0	54.4	78.2	61.4	57.0	20.1	10.2	8.2	12.6	2.3
Maritime Administration	NA	NA	NA	14.2	11.1	15.0	9.9	13.9	9.4	5.8	.5
National Highway Traffic											
Safety Administration	66.3	56.6	63.6	65.9	55.4	52.0	56.9	28.1	22.4	27.9	28.3
Office of the Secretary	31.7	11.7	10.8	10.1	3.3	4.9	4.9	4.8	5.1	4.5	5.7
Research & Special Programs											
Administration .....	.9	15.0	14.0	13.1	6.1	6.2	5.2	2.7	2.0	2.1	2.1
Dept of the Treasury, total	9.9	9.5	12.0	11.3	13.3	15.6	13.9	24.3	24.0	26.9	26.1
Bureau of Alcohol, Tobacco, & Firearms	2.0	2.5	1.6	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	3.7	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0
Internal Revenue Service	2.4	3.6	4.0	4.2	5.4	8.0	8.2	15.9	14.2	14.6	14.4
US Customs Service	1.8	1.3	3.8	3.5	3.1	3.3	1.8	2.2	4.8	7.0	9.2
United States Mint .....	.0	.0	.0	.0	.0	.0	.0	.6	.3	.2	.1
United States Secret Service	NA	NA	.4	.6	.0	.3	.2	.6	.4	.5	.4
Department of Veterans Affairs	114.0	127.0	133.4	144.4	137.3	161.4	190.3	226.6	186.2	209.5	215.3
Other agencies:											
ACTION	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on											
Intergovernmental Relations	1.7	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8
Appalachian Regional Comm .....	.5	.9	.8	.4	.4	.2	.5	.2	.2	.1	.2
Community Services Admin	24.3	20.7	30.3	18.3	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	3.8	3.9	3.5	.5	.2	.5	1.3	2.4	2.0	2.2	1.1
Environmental Protection Agcy	384.6	410.1	345.0	325.7	335.1	240.7	261.2	320.4	317.3	348.2	347.4
Fed Communications Comm	2.4	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2
Federal Emergency Management											
Agency, total	7.0	12.6	11.8	11.6	9.2	3.3	11.5	4.1	.0	.0	.0
National Fire Prevention & Control Administration	7.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.5	3.0	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4
Foundation for Ed Assistance	NA	NA	NA	104.9	NA	NA	NA	NA	NA	NA	NA
General Services Admin	2.7	.5	.2	.6	1.0	.5	2.4	.4	1.2	1.6	2.3
International Development											
Cooperation Agency, total	NA	106.5	149.3	134.2	199.9	227.3	237.2	220.4	251.2	217.5	204.4
Agcy for Internat'l Dvlpmt	NA	106.5	149.3	134.2	199.9	227.3	237.2	220.4	251.2	217.5	204.4
Interstate Commerce Comm .....	.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-96. Federal obligations for research and development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 4 of 4

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Library of Congress	4.9	5.9	6.9	4.9	5.7	7.4	7.5	7.1	6.6	6.5	7.1
Nat'l Aero & Space Admin	3,333.3	3,578.4	3,234.1	3,593.2	3,077.9	2,661.6	2,821.9	3,327.2	3,419.8	3,787.1	4,330.4
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7
National Science Foundation	748.8	807.9	881.8	961.6	975.3	1,062.0	1,202.8	1,345.6	1,353.3	1,470.5	1,532.8
Nuclear Regulatory Commission	133.9	148.8	182.7	219.7	220.3	207.3	190.7	150.0	123.8	122.5	108.5
Office of Personnel Management ...	4.5	6.0	6.8	8.4	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Smithsonian Institution	34.9	36.9	41.0	44.9	52.4	56.0	63.6	71.1	63.3	71.5	75.1
Tennessee Valley Authority	31.5	38.4	80.1	68.9	85.0	63.0	68.1	79.5	77.5	77.9	87.3
United States Arms Control & Disarmament Agency	3.6	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	3.6	3.4
US Information Agency .....	.1	.1	.1	1.5	.1	-	1.4	.1	2.0	3.5	.4
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-96a. Federal obligations for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	61,406.5	63,559.5	61,295.2	65,592.6	67,314.0	67,235.4	68,186.8	67,655.0	69,829.9	72,114.1	73,333.2
Departments:											
Dept of Agriculture, total	1,038.3	1,108.4	1,236.6	1,327.1	1,327.8	1,399.9	1,380.2	1,300.3	1,388.6	1,441.9	1,425.6
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.5	2.7	4.2	4.7	4.7	4.8	4.8	4.9	4.8	4.7	4.8
Agricultural Research Svc	523.5	545.5	591.0	627.1	627.2	678.7	683.3	675.2	687.6	719.1	751.2
Animal & Plant Health Inspection Service	7.4	8.0	15.7	16.7	17.1	19.2	19.1	18.0	19.8	19.5	19.0
Cooperative State Research, Ed. & Extension Svc	307.3	324.2	376.8	418.2	418.6	429.0	417.7	362.4	433.5	428.8	395.7
Economic Research Service	49.5	50.5	54.4	58.9	58.9	55.2	53.8	53.0	53.0	71.6	55.8
Food Safety Inspection Svc .....	.0	.0	.0	.0	.0	.0	.0	-	-	-	-
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	1.1	.9	1.3	1.4	1.4	1.4
Forest Service	131.4	158.6	174.7	180.7	182.7	193.1	193.5	177.9	179.8	188.0	188.0
Grain Inspection Packers & Stockyards Administration	1.1	.6	.7	1.5	1.8	1.8	1.5	2.5	2.8	2.8	2.8
Human Nutrition Info Svc	8.4	9.0	9.9	10.7	8.4	7.0	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	2.9	2.8	3.2	3.6	3.9	3.9	4.0	3.8	3.4	3.5	3.4
Office of International Cooperation & Dvlpmnt	2.5	3.6	3.1	1.5	1.5	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	397.9	438.2	489.6	651.2	656.3	826.1	1,136.0	1,067.5	1,003.1	978.7	1,035.5
Bureau of the Census	4.9	6.9	6.6	5.3	5.4	4.8	4.9	6.3	5.1	5.5	9.1
Economic Development Admin	1.0	1.2	1.4	.5	.0	.6	.5	.6	.6	.6	.6
National Institute of Standards & Technology	115.5	122.3	140.0	179.0	207.2	253.2	563.3	516.5	460.4	403.3	483.9
National Oceanic & Atmospheric Administration	268.6	300.1	338.0	462.4	439.5	562.6	560.9	528.5	509.3	543.2	516.2
National Telecommunications & Information Administration	7.8	7.7	3.6	4.0	4.2	4.8	6.4	15.7	27.8	26.2	25.8
Office of the Secretary .....	.0	.0	.0	.0	.0	.0	-	-	.0	.0	.0
Department of Defense, total	37,576.9	37,268.1	32,134.8	36,129.5	35,849.1	34,553.2	33,796.3	34,535.4	34,788.3	34,832.5	34,350.4
Department of the Army	5,659.3	5,684.1	6,081.5	6,854.2	6,209.1	5,574.1	5,419.3	4,873.6	4,821.1	5,152.5	4,834.1
Department of the Navy	9,666.1	9,586.2	7,806.0	8,030.8	9,102.9	8,929.0	8,963.3	8,606.4	8,215.5	8,065.7	8,287.2
Department of the Air Force	15,237.4	14,831.4	10,937.5	13,427.1	12,635.3	12,527.4	11,797.9	13,042.1	13,951.5	13,851.3	13,627.4
Defense Agencies	6,858.9	6,945.2	7,072.5	7,571.7	7,647.0	7,279.7	7,363.2	7,733.8	7,503.8	7,500.6	7,325.5
Operational Test & Evaluation, Director	14.4	32.6	13.6	12.4	12.3	11.2	21.7	21.9	26.6	27.8	25.3
Test & Evaluation, Deputy Under Secretary of Defense	140.7	188.7	223.7	233.2	242.5	231.8	231.0	257.7	269.7	234.6	251.0
Department of Education	159.1	169.9	171.0	168.5	177.7	176.6	177.6	173.7	181.2	211.8	262.7
Department of Energy	5,192.6	5,630.6	5,983.1	6,172.2	6,262.1	6,048.0	6,145.0	5,344.9	5,603.5	5,833.1	6,540.8

See explanatory information, if any, and SOURCE at end of table.

**Table C-96a. Federal obligations for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 2 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Department of Health & Human Services, total	7,902.8	8,405.6	9,756.0	8,987.8	10,349.2	11,021.5	11,455.2	11,953.1	12,787.9	13,717.8	14,821.0
Administration on Aging	NA	NA	20.6	20.2	20.9	19.1	20.7	3.7	4.4	10.4	10.4
Administration for Children & Families	NA	NA	129.0	39.2	19.9	11.3	12.0	12.6	17.4	20.1	32.9
Agency for Health Care Policy & Research	NA	49.7	101.1	106.3	114.8	154.4	135.3	125.2	144.0	146.5	171.4
Alcohol, Drug Abuse, & Mental Health Administration ¹	695.7	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	323.0	358.5	365.2
Food & Drug Administration	99.0	99.0	125.0	135.7	154.5	169.4	170.5	170.8	158.6	159.1	169.4
Health Care Financing Admin	49.1	49.1	69.1	75.5	68.2	80.0	74.5	52.7	43.6	50.0	50.0
Hlth Resources & Svcs Admin	10.5	11.9	11.0	10.1	9.6	16.4	13.2	11.1	13.1	13.5	13.7
Human Development Svcs	101.7	95.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	6,778.3	7,136.5	7,695.5	8,409.2	9,765.1	10,329.4	10,681.8	11,251.0	11,993.0	12,866.9	13,915.0
Office of the Assistant Secretary for Health	27.2	6.9	10.0	6.7	1.2	.8	.3	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	8.0	11.7	9.1	12.7	21.7	16.8	16.9
Office of the Assistant Sec, Planning & Eval	NA	NA	NA	NA	NA	NA	NA	9.0	18.4	14.0	14.0
Office of Public Health & Science	NA	NA	NA	NA	NA	NA	NA	3.7	3.3	2.8	2.9
Social Security Admin	15.8	13.9	11.9	33.0	24.5	22.2	20.4	NA	NA	NA	NA
Substance Abuse & Mental Health Services Admin	NA	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0
Dept of Housing & Urban Dvlpmnt ...	18.0	19.3	27.8	25.1	23.6	39.6	41.8	33.1	33.5	39.6	50.5
Dept of the Interior, total	469.0	508.5	592.9	609.2	619.1	694.1	561.6	567.5	579.9	613.3	637.9
Bureau of Land Management	3.0	2.8	8.8	6.3	8.9	.0	.0	.0	.0	.0	.0
Bureau of Mines	98.7	99.3	106.1	107.1	111.9	107.9	.0	NA	NA	NA	NA
Bureau of Reclamation	4.2	5.8	8.7	13.2	10.3	7.4	8.0	6.5	7.1	9.0	10.2
Geological Survey	279.9	308.4	356.6	361.4	356.7	371.1	362.0	518.9	526.3	545.3	566.2
Minerals Management Service ...	2.2	1.9	2.7	3.8	5.8	20.6	20.0	21.9	20.6	25.4	27.5
Nat'l Biological Svc	NA	NA	NA	NA	.0	162.8	151.8	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	38.1	24.2	19.7	20.2	26.0	33.5	34.0
Office of the Secretary .....	.4	.2	.6	.9	.4	.1	-	.0	.0	.0	.0
Office of Surface Mining Reclamation & Enforcement ...	.7	.7	1.0	.3	.5	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	60.6	69.4	81.0	85.1	86.5	.0	.0	.0	.0	.0	.0
Department of Justice, total	38.2	40.5	48.9	48.0	48.9	45.0	57.9	77.3	84.7	102.9	97.9
Bureau of Prisons	5.1	4.5	5.2	5.9	6.1	5.4	5.7	5.2	4.6	6.0	6.2
Drug Enforcement Admin ²	2.7	2.4	2.7	1.4	.9	.9	.4	1.2	-	-	-
Fed Bureau of Investigation	7.7	8.2	10.8	10.9	11.3	7.0	10.9	33.5	35.5	35.7	35.8
Immigration & Naturalization Service ³ .....	.1	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	22.5	25.0	29.8	29.4	30.2	31.4	40.5	37.2	44.2	60.7	55.5
Department of Labor, total	35.4	73.0	44.0	51.7	55.0	59.7	55.4	52.4	35.1	46.8	69.4
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	6.9	7.1	14.8	13.3	12.6	12.4	12.4
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	15.7	53.4	22.1	31.7	35.9	40.0	25.6	26.9	14.1	27.1	49.4
Labor-Management Relations & Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	4.5	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.5	4.6
Office of the Secretary	6.1	7.1	8.7	5.9	5.8	5.3	6.3	2.6	.2	.2	.2
Pension Benefit Guaranty Corp ..	.3	.5	.5	.9	1.3	1.3	.8	.7	.7	.7	.7
Pension & Welfare Benefits Administration	1.4	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	4.7	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	1.0	1.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-96a. Federal obligations for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	303.3	366.6	379.9	445.0	545.3	620.7	727.0	552.5	526.9	664.7	767.9
Coast Guard	17.9	20.2	25.5	20.1	32.9	22.3	19.7	20.0	22.9	22.5	19.3
Federal Aviation Admin	146.8	216.1	220.1	236.2	248.9	285.6	288.4	208.3	209.1	207.2	290.0
Federal Highway Admin	91.0	91.5	86.9	130.2	174.9	235.7	312.5	240.0	210.3	340.9	360.2
Federal Railroad Admin	9.0	10.2	15.9	22.7	25.2	19.5	26.5	26.7	18.9	20.0	20.1
Federal Transit Admin	1.4	1.6	1.7	1.7	24.3	19.9	28.7	13.7	17.0	16.5	16.2
Maritime Administration .....	.0	.9	1.7	1.8	1.7	1.7	2.5	.0	.0	.0	.0
National Highway Traffic Safety Administration	29.7	16.9	21.4	25.8	31.6	25.3	39.7	33.2	36.4	42.4	51.4
Office of the Secretary	5.5	6.8	4.3	4.1	4.5	5.4	3.9	2.8	3.5	4.1	3.5
Research & Special Programs Administration	2.0	2.4	2.4	2.5	1.3	5.3	5.0	7.7	8.7	11.1	7.2
Dept of the Treasury, total	25.6	25.6	30.8	24.6	16.6	19.0	61.4	60.0	59.7	74.2	75.3
Bureau of Engraving & Printing	1.7	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	1.9	1.9
Financial Crimes Enforcement Network .....	.0	.0	2.3	1.2	1.5	.0	.0	.0	.0	.0	.0
Internal Revenue Svc	14.4	16.8	17.9	17.9	6.5	11.3	49.7	51.2	50.8	61.7	62.9
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴	6.8	6.2	3.7	2.2	4.0	4.5	8.5	6.2	6.1	8.8	8.8
United States Mint	2.0	.1	.1	.0	.1	.5	.3	.0	-	.5	.2
US Secret Service .....	.6	.5	.4	.5	.6	.5	.5	.5	.4	.6	.8
Department of Veterans Affairs	234.7	237.7	216.6	223.9	236.2	248.0	237.9	256.1	252.7	299.3	300.0
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.1	1.5	1.7	1.7	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm	1.3	1.1	1.3	1.1	1.2	.3	.4	-	.1	.2	.2
Environmental Protection Agcy	380.3	419.7	432.6	483.9	495.3	553.5	551.5	464.3	492.2	606.0	610.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation Agency, total	279.1	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	183.9	184.2
Agency for International Development ⁵	279.1	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	183.9	184.2
Library of Congress	8.0	8.4	9.0	10.3	10.5	10.0	10.2	10.6	2.8	2.5	2.7
Nat'l Aero & Space Admin ⁶	5,393.5	6,533.2	7,280.2	7,657.6	8,019.9	8,296.2	9,014.9	8,570.1	9,327.3	9,850.7	9,201.1
Nat'l Archives & Records Admin .....	.3	.4	.7	.7	.3	.3	.1	.1	.1	.1	.1
National Science Foundation	1,670.4	1,689.5	1,785.2	1,868.4	1,881.9	2,040.4	2,149.3	2,188.3	2,248.5	2,356.9	2,654.8
Nuclear Regulatory Commission	114.8	108.8	108.8	119.0	119.8	90.7	88.2	70.9	62.1	50.7	52.8
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Institution	80.2	84.0	98.0	98.0	102.0	124.2	124.0	127.0	130.0	134.0	142.0
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	62.6	64.9	68.3	97.3	108.6	97.9	93.1	6.1	8.9	2.9	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-96a. Federal obligations for research and development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 4 of 4

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
United States Arms Control & Disarmament Agency	2.8	0.2	0.4	2.1	1.5	1.3	1.1	0.7	1.2	0.8	0.8
US Information Agency .....	.1	.5	.1	.0	1.1	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-97. Federal obligations for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 2

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	1,295.7	1,475.5	1,555.7	1,485.7	1,389.8	1,297.5	1,787.3	1,820.8	1,538.8	1,846.0	2,057.1
Departments:											
Dept of Agriculture, total	24.7	22.6	56.9	20.8	21.5	33.9	39.2	40.6	79.4	111.8	135.2
Agricultural Research Svc	NA	NA	NA	17.6	21.1	23.4	28.8	29.0	69.2	43.9	55.5
Animal & Plant Health											
Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
Cooperative State Research,											
Ed. & Extension Service	NA	NA	NA	.0	.0	10.0	10.0	10.0	9.5	67.6	76.2
Forest Service	2.7	3.5	3.6	3.2	.4	.5	.4	1.6	.6	.3	2.9
Science & Ed Admin, total	22.0	19.1	53.2	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	22.0	19.1	53.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	4.1	2.4	4.6	1.3	1.0	.7	9.4	4.2	9.3	5.2	11.2
Maritime Administration	1.0	.9	.5	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of											
Standards & Technology .....	.8	1.5	.3	.5	1.0	.7	9.4	4.2	7.7	2.0	10.7
National Oceanic &											
Atmospheric Administration	2.3	.0	3.9	.8	.0	.0	.0	.0	1.5	3.2	.5
Department of Defense, total	232.6	270.2	208.2	277.7	290.5	312.5	529.2	530.9	286.1	477.2	435.8
Department of the Army	7.6	3.8	13.8	12.8	24.7	26.3	56.2	52.9	53.9	65.8	92.8
Department of the Navy	48.3	68.1	83.2	97.9	155.9	141.7	173.4	182.1	97.6	69.0	74.9
Department of the Air Force	160.1	167.5	108.0	159.6	84.7	138.7	285.4	291.3	130.1	270.3	143.7
Defense Agencies	16.6	30.8	3.2	7.4	25.2	5.8	14.2	4.6	4.5	72.1	124.4
Department of Education	NA	.0	.0	.0	.0	.0	.0	1.1	6.6	21.0	5.2
Department of Energy	690.7	844.4	1,024.1	978.2	914.0	757.7	852.4	868.4	742.3	772.2	915.0
Dept of Health, Education, &											
Welfare, total	74.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration .....	.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	73.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human											
Services, total	NA	53.5	30.6	23.7	24.7	47.9	31.1	42.1	37.9	36.7	19.5
Alcohol, Drug Abuse, & Mental											
Health Administration	NA	.1	.0	.2	3.3	1.8	.3	.4	.5	.6	.0
Food & Drug Administration	NA	5.8	1.2	1.2	2.0	28.5	3.0	13.0	8.0	.8	.5
National Insts of Health	NA	47.6	29.4	22.3	19.4	17.5	27.8	28.8	29.4	35.3	19.0
Dept of the Interior, total	15.0	5.0	7.5	3.5	1.3	2.4	5.2	4.2	4.3	11.8	9.4
Bonneville Power Admin .....	.0	.0	.0	.3	NA	NA	NA	NA	NA	NA	NA
Bureau of Mines	7.1	.3	1.0	.6	.1	.1	-	.0	.0	.0	.0
Geological Survey .....	.0	.0	.0	.0	.0	1.4	1.0	.8	.8	.8	.8
Office of Surface Mining											
Reclamation & Enforcement .....	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
Office of Water Rsch & Tech .....	.6	.7	.7	.8	.9	.0	.0	NA	NA	NA	NA
US Fish & Wildlife Service	7.3	4.0	5.5	1.8	.3	.9	4.2	3.4	3.5	11.0	8.6
Department of Justice, total .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.1	.0
Fed Bureau of Investigation .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.1	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-97. Federal obligations for R&D plant, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 2

Agency and subdivision	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of State, total	0.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Agcy for Internat'l Dvlpmt .....	.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dept of Transportation, total	14.1	22.6	23.3	18.9	11.9	21.9	16.9	9.0	12.1	11.2	13.9
Coast Guard .....	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Federal Aviation Admin	1.0	9.9	5.7	8.9	5.1	21.4	16.4	8.5	10.9	10.4	13.2
Federal Highway Admin .....	.4	.6	7.2	-	.0	.0	.0	.0	.7	.3	.0
Federal Railroad Admin	11.8	11.9	10.2	9.5	6.3	.0	.0	.0	.0	.0	.4
National Highway Traffic Safety Administration .....	.2	.2	.2	.5	.5	.5	.5	.5	.5	.5	.0
Dept of the Treasury, total	-	-	-	.1	.1	.1	.1	.1	.1	.1	.1
US Customs Service	-	-	-	.1	.1	.1	.1	.1	.1	.1	.1
United States Secret Service	NA	NA	.0	.0	.0	.0	.0	.0	.1	-	-
Department of Veterans Affairs	4.1	5.1	4.4	14.8	2.8	10.5	6.1	3.3	4.8	5.9	19.5
Other agencies:											
Consumer Product Safety Comm .....	.3	2.7	2.7	.0	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agcy	4.6	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
General Services Admin .....	.0	.0	.0	.0	.0	.0	.0	.0	18.8	.0	.0
International Development Cooperation Agency, total	NA	6.4	6.3	8.0	6.0	4.8	7.8	6.9	7.5	6.8	6.1
Agcy for Internat'l Dvlpmt	NA	6.4	6.3	8.0	6.0	4.8	7.8	6.9	7.5	6.8	6.1
Nat'l Aero & Space Admin	162.3	147.5	159.1	115.8	113.7	100.8	244.2	234.3	275.0	309.4	428.2
National Science Foundation	39.7	30.2	18.7	14.6	1.5	3.2	45.2	73.6	53.2	61.3	56.9
Nuclear Regulatory Commission	6.9	8.6	7.7	7.7	.0	.0	.0	.0	.0	.0	.0
Smithsonian Institution .....	.2	1.0	.9	.4	.5	1.0	.2	1.6	.7	2.9	.7
Tennessee Valley Authority	21.9	50.8	.6	.4	.3	.3	.2	.5	.8	.3	.4
United States Arms Control & Disarmament Agency .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-97a. Federal obligations for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 2

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	2,165.1	2,271.7	2,852.8	2,984.6	3,100.7	2,215.4	2,256.1	1,746.1	1,914.8	2,088.8	1,997.3
Departments:											
Dept of Agriculture, total	89.2	102.2	144.6	164.7	142.4	125.7	143.4	128.4	184.2	107.1	103.3
Agricultural Research Svc	55.2	44.4	64.7	98.1	78.3	78.3	67.7	67.9	118.9	103.6	100.6
Animal & Plant Health											
Inspection Service .....	.3	6.1	.0	.0	.0	.0	.0	1.5	.0	.0	.0
Cooperative State Research,											
Ed, & Extension Svc	32.2	46.9	61.5	63.0	60.5	42.6	71.3	56.5	63.2	.8	.0
Forest Service	1.6	4.9	18.4	3.6	3.6	4.9	4.3	2.5	2.0	2.7	2.7
Department of Commerce, total	9.1	15.4	15.7	21.0	25.4	31.2	77.7	84.5	43.4	130.5	70.1
National Institute of											
Standards & Technology	8.6	8.8	8.5	11.2	12.6	30.9	77.2	84.5	21.8	103.6	56.7
National Oceanic &											
Atmospheric Administration .....	.5	6.6	7.3	9.9	12.8	.3	.5	.0	21.6	26.9	13.4
Department of Defense, total	499.3	487.3	425.7	396.5	371.5	265.7	60.5	46.8	85.5	95.0	76.1
Department of the Army	45.1	53.1	91.0	22.0	18.1	2.1	5.5	6.2	4.1	4.1	4.2
Department of the Navy	89.6	60.4	54.0	96.0	45.5	76.1	11.3	8.0	37.0	41.6	20.5
Department of the Air Force	250.2	322.2	152.3	179.7	231.6	99.3	37.8	24.4	39.1	48.9	50.8
Defense Agencies	114.4	51.6	128.4	98.8	76.3	88.2	5.9	8.3	5.3	.4	.6
Department of Education	1.9	8.9	4.2	2.4	2.2	1.8	1.8	.0	.0	.0	.0
Department of Energy	873.0	916.0	1,220.1	1,320.8	1,461.5	911.8	745.1	705.9	729.3	759.3	936.8
Department of Health & Human											
Services, total	78.6	107.8	86.3	96.7	149.3	120.2	255.7	133.1	260.1	416.7	253.8
Food & Drug Administration	23.0	23.0	18.4	14.3	19.7	8.4	5.3	5.5	14.5	21.4	5.2
Hlth Resources & Svcs Admin .....	.0	.0	.0	.3	1.4	1.4	1.6	.7	.7	.7	.7
National Insts of Health ¹	55.6	84.8	67.8	82.1	128.2	110.5	248.8	126.9	244.9	394.7	248.0
Social Security Admin .....	.0	.0	-	.0	.0	.0	.0	NA	NA	NA	NA
Dept of the Interior, total	10.8	14.0	22.2	18.4	23.1	9.0	6.7	1.9	7.2	2.2	2.2
Bureau of Mines	2.6	3.0	2.1	.0	.0	.0	.0	NA	NA	NA	NA
Geological Survey	1.3	1.3	3.3	4.3	3.8	6.4	5.4	1.2	5.0	1.2	1.2
Minerals Management Service .....	.0	.2	.3	1.0	1.1	1.2	1.0	.8	2.2	1.0	1.0
Nat'l Biological Svc	NA	NA	NA	NA	.0	1.4	.3	NA	NA	NA	NA
US Fish & Wildlife Service	6.9	9.5	16.6	13.1	18.3	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-97a. Federal obligations for R&D plant, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 2 of 2

Agency and subdivision	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total	15.5	21.8	18.4	25.3	32.3	40.9	28.8	31.8	19.0	18.6	24.9
Coast Guard .....	.0	.4	.4	.4	.5	.5	.5	.5	.3	.3	.3
Federal Aviation Admin	15.5	21.4	16.3	24.0	22.4	33.0	21.7	20.6	17.2	14.3	14.3
Federal Highway Admin .....	.0	.0	.0	.8	.9	6.3	3.0	7.3	.9	3.3	9.7
Federal Railroad Admin .....	.0	.0	1.7	.1	1.6	1.1	3.5	3.4	.6	.8	.6
Federal Transit Admin .....	.0	.0	.0	.0	7.0	.0	.0	.0	.0	.0	.0
Dept of the Treasury, total .....	.1	.1	.1	.1	.2	.2	.2	.2	.1	.1	.1
US Customs Service ² .....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
US Secret Service	-	-	-	-	-	-	-	-	.0	.0	.0
Department of Veterans Affairs	11.0	3.3	3.4	5.7	3.4	11.7	7.2	3.8	31.3	1.2	1.2
Other agencies:											
Environmental Protection Agcy .....	.0	.0	.0	.0	2.5	4.8	4.8	.0	25.0	31.0	21.0
General Services Admin .....	.0	18.8	22.6	6.5	1.0	.3	5.1	.1	-	-	-
Nat'l Aero & Space Admin ³	519.5	527.0	723.6	817.8	749.4	515.3	624.8	417.4	321.9	312.0	300.9
National Science Foundation	53.6	39.3	159.6	101.6	130.4	171.9	289.6	187.2	203.8	210.6	202.2
Smithsonian Institution	3.4	4.8	1.5	3.8	5.0	5.0	5.0	5.0	4.0	4.5	4.5
Tennessee Valley Authority ⁴ .....	.2	4.9	4.8	3.2	1.0	.0	.0	.0	.0	.0	.0

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

³ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁴ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars

NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-98. Federal obligations for research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	9,606.8	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1
Departments:											
Dept of Agriculture, total	594.5	631.9	657.4	741.0	766.5	817.6	834.9	910.9	896.4	918.9	985.2
Agricultural Cooperative Svc	NA	NA	1.6	1.7	1.7	2.1	2.2	2.9	2.6	2.7	2.7
Agricultural Marketing Svc .....	.0	.4	1.0	.9	1.0	1.1	1.2	1.3	1.3	1.2	1.3
Agricultural Research Svc	NA	NA	NA	367.9	379.1	417.9	424.3	442.0	436.0	454.6	479.4
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6
Cooperative State Research, Ed, & Extension Service	NA	NA	NA	199.4	219.0	232.3	235.7	284.3	269.0	270.7	298.4
Economic Research Service	NA	NA	NA	39.3	39.3	38.8	43.7	46.4	44.6	44.8	48.1
Economics, Stat, & Coop Svc	32.7	35.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	31.1	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	100.7	102.5	106.1	119.9	107.7	103.9	105.1	109.8	109.7	122.9	131.5
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.8	.6	.7	.6
Human Nutrition Info Svc	NA	NA	NA	.0	8.5	8.2	6.0	6.7	12.8	6.8	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	7.0	7.6	8.2	8.4	8.0	3.4	3.6
Office of International Cooperation & Development ...	NA	.0	4.9	3.6	2.4	4.8	7.5	7.3	6.6	5.3	4.8
Office of Transportation	NA	.0	.0	.8	.8	.8	.9	1.1	.9	.9	.9
Science & Ed Admin, total	461.1	493.5	512.8	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	303.7	320.9	328.6	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	157.4	172.6	184.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	192.8	219.5	254.4	249.4	276.1	284.8	296.7	324.2	339.5	338.6	342.3
Bureau of the Census	2.3	1.8	1.9	3.0	1.9	2.2	2.4	2.5	2.6	2.8	3.8
Economic Development Admin ...	5.9	8.5	2.5	1.8	1.6	5.3	5.1	2.0	2.3	5.0	4.2
Maritime Administration	7.0	12.2	12.1	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	48.5	51.8	58.9	66.2	73.9	81.5	83.7	86.5	89.1	89.4	98.9
National Oceanic & Atmospheric Administration	127.9	142.7	168.8	168.5	188.5	188.9	197.7	224.4	237.5	234.4	228.2
National Telecommunications & Information Administration	1.1	2.4	9.6	9.9	10.1	6.9	7.7	7.9	7.6	7.0	7.3
Office of the Secretary .....	.0	.1	.5	.0	-	-	-	.9	.3	-	.0
Department of Defense, total	1,824.1	2,014.1	2,261.8	2,600.9	2,952.8	3,222.6	3,048.5	3,168.3	3,227.3	3,347.6	3,239.1
Department of the Army	409.8	448.6	479.3	536.5	639.2	693.6	708.8	823.4	827.3	909.9	753.7
Department of the Navy	526.3	567.3	611.1	698.0	778.7	827.0	765.4	791.3	784.3	786.7	747.8
Department of the Air Force	448.7	492.3	537.3	617.3	633.9	688.4	740.1	736.7	759.0	784.8	773.1
Defense Agencies	431.7	505.9	634.1	749.1	901.0	1,013.6	834.3	816.9	856.7	866.1	964.5
Def Civil Preparedness Agcy	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Education	NA	93.4	87.6	.0	70.5	76.1	80.9	91.9	95.8	106.9	111.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-98. Federal obligations for research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Energy	1,102.2	1,131.8	1,277.3	1,413.6	1,696.1	1,961.1	2,024.9	2,141.0	2,040.3	2,097.9	2,235.4
Dept of Health, Education, & Welfare, total	2,740.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	178.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	60.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	64.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	19.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	10.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	34.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	2,232.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	32.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	13.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	45.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	12.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	3,015.7	3,332.8	3,492.2	3,605.6	4,020.8	4,466.0	5,028.3	5,189.6	6,021.9	6,497.0
Alcohol, Drug Abuse, & Mental Health Administration	NA	213.5	233.5	237.7	246.1	300.4	336.0	376.4	394.9	473.3	552.4
Centers for Disease Control & Prevention	NA	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7
Food & Drug Administration	NA	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0
Health Care Financing Admin	NA	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2
Health Resources Admin	NA	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	6.7	11.0	16.2	18.2	12.3	9.3	10.0
Health Services Admin	NA	10.2	8.0	10.2	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	14.9	19.1	39.9	8.7	6.9	4.5	5.8	6.8	9.4	7.1
National Insts of Health	NA	2,530.1	2,787.5	2,948.3	3,124.5	3,478.2	3,910.4	4,428.1	4,587.6	5,314.7	5,680.7
Office of the Assistant Secretary for Health	NA	29.9	25.7	28.8	13.9	16.6	18.1	16.9	15.8	18.9	19.4
Office of the Secretary	NA	24.7	24.0	19.5	13.1	14.4	10.0	9.4	6.1	8.2	4.7
Social Security Admin	NA	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7
Dept of Housing & Urban Dvlpmnt ...	30.5	23.8	19.6	16.7	10.3	11.3	6.3	6.5	5.3	5.5	6.3
Dept of the Interior, total	283.5	339.5	354.4	369.8	351.5	357.7	380.2	369.3	367.9	382.1	392.5
Bonneville Power Admin .....	.0	.0	.0	6.5	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.0	1.1	1.3	1.5	2.4	2.0	1.8	2.8	2.1	2.1	2.2
Bureau of Mines	57.0	79.1	82.8	68.0	81.1	79.4	97.2	86.5	81.6	85.2	86.2
Bureau of Reclamation	10.6	11.4	12.9	13.4	9.0	8.8	9.0	11.2	9.7	10.2	3.7
Geological Survey	133.7	145.1	145.8	169.3	152.1	154.7	204.0	210.5	211.2	216.5	225.3
Minerals Management Service ...	NA	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary	1.7	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.1
Office of Surface Mining Reclamation & Enforcement ...	2.2	5.0	7.5	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	15.4	17.8	18.4	15.8	10.1	1.2	3.6	NA	NA	NA	NA
US Fish & Wildlife Service	54.2	69.6	75.2	77.8	83.6	87.5	48.3	37.9	41.7	47.6	53.5
Department of Justice, total	45.7	28.8	28.8	19.5	16.3	20.7	17.9	19.3	22.3	19.8	17.4
Bureau of Prisons .....	.7	.5	.9	1.7	.9	1.3	1.2	1.1	2.7	2.2	2.1
Drug Enforcement Admin .....	.5	.7	.8	.4	1.3	.9	.7	.5	.8	.7	.6
Immigration & Naturalization Service .....	.2	.1	.2	.1	.3	.3	.3	.2	.2	.2	.3
Office of Justice Programs	43.3	25.9	25.6	16.7	13.4	18.0	15.7	17.2	18.5	16.7	14.4
Office of Legal Policy	1.1	1.6	1.3	.7	.4	.2	.0	.3	.2	.1	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-98. Federal obligations for research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	25.7	42.1	36.4	58.2	17.2	17.9	16.3	12.4	9.5	20.4	26.7
Bureau of Labor Statistics .....	.8	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.7	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1
Employment & Training Admin ...	14.9	25.9	20.1	48.8	8.7	7.9	6.1	3.5	3.5	5.4	6.8
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.8	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.4	1.1	.9	1.5	1.9	1.7	1.3	1.8	5.2
Pension Benefit Guaranty Corp ..	NA	NA	NA	.1	.3	.3	.3	.2	.1	.3	.3
Pension & Welfare Benefits											
Administration	NA	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7
Department of State, total	49.1	2.7	2.0	1.6	1.5	1.5	1.6	1.5	1.5	3.0	4.2
Agcy for Internat'l Dvlpmt	46.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.5	2.7	2.0	1.6	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	66.5	67.0	82.4	88.6	66.7	72.6	77.7	71.2	68.2	68.8	91.2
Coast Guard	2.3	10.9	8.1	15.0	1.7	1.2	7.2	5.4	3.5	3.7	5.4
Federal Aviation Admin	6.8	7.5	8.2	8.2	7.0	12.5	15.0	17.3	14.0	11.1	13.3
Federal Highway Admin	4.9	4.4	4.6	5.1	5.3	7.3	6.1	6.3	14.7	20.7	43.7
Federal Railroad Admin	9.2	7.5	7.9	6.2	3.1	2.8	12.3	11.4	12.5	10.4	8.2
Federal Transit Admin	1.1	1.1	8.9	9.3	19.4	18.3	1.0	.5	.0	.0	.0
Maritime Administration	NA	NA	NA	9.5	6.6	6.2	8.6	8.0	6.8	3.3	.5
National Highway Traffic											
Safety Administration	38.0	30.0	38.6	29.4	21.3	21.4	24.7	20.9	16.1	18.9	19.1
Office of the Secretary	4.1	.6	.6	.7	.3	.3	.9	.9	.4	.4	.7
Research & Special Programs											
Administration .....	.1	5.0	5.5	5.2	2.1	2.6	1.8	.5	.3	.2	.4
Dept of the Treasury, total	4.1	4.7	5.7	5.2	8.1	10.2	10.6	18.3	17.7	17.4	15.9
Bureau of Alcohol, Tobacco, & Firearms .....	.4	.7	.3	.1	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	1.9	.6	1.3	.9	2.8	2.0	2.2	3.4	3.1	2.8	1.2
Internal Revenue Service	1.8	3.5	3.9	4.2	5.3	7.9	8.1	14.7	14.0	14.1	13.7
US Customs Service .....	.0	.0	.1	.1	-	.0	.1	.1	.2	.2	.7
United States Secret Service	NA	NA	.0	.0	.0	.3	.1	.2	.4	.2	.4
Department of Veterans Affairs	99.4	111.4	117.9	127.7	123.0	146.1	171.9	209.1	169.9	190.3	196.1
Other agencies:											
ACTION .....	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on											
Intergovernmental Relations	1.7	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8
Appalachian Regional Comm .....	.3	.7	.6	.3	.3	.2	.4	.2	.2	.1	.2
Community Services Admin	2.0	1.8	1.3	1.9	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	.9	1.8	1.6	.2	.1	.3	1.1	1.4	1.1	.6	.1
Environmental Protection Agcy	252.7	259.0	245.1	218.3	243.4	174.6	172.0	214.6	217.8	277.2	267.9
Fed Communications Comm	2.4	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2
Federal Emergency Management											
Agency, total	4.8	9.7	9.3	9.1	9.2	3.3	6.1	2.9	.0	.0	.0
National Fire Prevention & Control Administration	4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.5	3.0	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4
Foundation for Ed Assistance	NA	NA	NA	53.8	NA	NA	NA	NA	NA	NA	NA
General Services Admin	2.2	.2	.1	.4	.5	.2	.4	.4	.9	1.6	2.3
International Development											
Cooperation Agency, total	NA	66.9	79.7	86.4	127.9	156.7	167.0	159.8	184.9	154.0	135.1
Agcy for Internat'l Dvlpmt	NA	66.9	79.7	86.4	127.9	156.7	167.0	159.8	184.9	154.0	135.1
Interstate Commerce Comm .....	.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
Library of Congress .....	.5	.6	.6	.9	.9	1.3	2.1	2.1	1.6	1.5	1.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-98. Federal obligations for research, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 4 of 4

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Nat'l Aero & Space Admin	1,345.2	1,451.2	1,609.6	1,407.2	1,407.1	1,544.8	1,709.2	1,783.6	2,069.0	2,269.2	2,331.6
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.2	.0	.7	.5
National Science Foundation	743.5	800.0	873.7	955.5	973.2	1,062.0	1,202.8	1,345.6	1,353.3	1,470.5	1,532.8
Nuclear Regulatory Commission	133.9	148.8	182.7	219.7	220.3	207.3	190.7	150.0	123.8	122.5	108.5
Office of Personnel Management ...	1.0	1.4	2.6	3.4	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Smithsonian Institution	34.9	36.9	41.0	44.9	52.4	56.0	63.6	71.1	63.3	71.5	75.1
Tennessee Valley Authority	13.5	16.5	15.8	14.2	12.7	12.3	14.3	14.4	17.8	17.7	18.5
United States Arms Control & Disarmament Agency	2.5	2.7	3.0	1.6	1.3	.8	1.2	1.1	.9	.4	.8
US Information Agency .....	.1	.1	.1	1.1	.0	-	1.4	.1	1.6	.0	.1
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-98a. Federal obligations for research, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 3

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	20,765.5	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.6	31,470.5	32,992.4
Departments:											
Dept of Agriculture, total	1,002.2	1,061.3	1,175.5	1,261.0	1,251.7	1,322.5	1,298.8	1,220.0	1,290.1	1,339.4	1,320.6
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.3	2.2	3.7	4.1	4.1	4.2	4.2	4.2	4.2	4.1	4.2
Agricultural Research Svc	492.1	512.3	550.8	583.2	574.3	624.4	628.6	621.2	625.7	654.4	683.6
Animal & Plant Health Inspection Service	7.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Cooperative State Research, Ed. & Extension Svc	307.3	324.2	376.8	418.2	418.6	429.0	417.7	362.4	433.5	428.8	395.7
Economic Research Service	49.5	50.5	54.4	58.9	58.9	55.2	53.8	53.0	53.0	71.6	55.8
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	1.1	.9	1.3	1.4	1.4	1.4
Forest Service	127.5	153.8	170.2	175.8	177.2	189.8	187.7	172.3	165.9	172.5	172.5
Grain Inspection Packers & Stockyards Administration .....	.8	.2	.7	1.5	1.8	1.8	.3	.5	.6	.6	.6
Human Nutrition Info Svc	8.4	9.0	9.9	10.7	8.4	7.0	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	2.9	2.8	3.2	3.6	3.9	3.9	4.0	3.8	3.4	3.5	3.4
Office of International Cooperation & Dvlpmnt	2.3	3.4	3.0	1.5	1.5	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	351.0	377.0	449.7	595.9	582.1	718.3	892.3	850.6	808.1	825.6	849.5
Bureau of the Census	3.0	4.9	4.8	3.4	3.3	2.8	2.9	2.5	3.4	3.6	6.1
Economic Development Admin	1.0	1.2	1.4	.5	.0	.6	.5	.6	.6	.6	.6
National Institute of Standards & Technology	105.6	111.8	124.3	149.4	172.9	207.3	372.1	354.8	331.5	305.1	348.6
National Oceanic & Atmospheric Administration	234.6	252.4	315.6	438.7	401.7	502.7	510.4	480.8	468.8	512.6	490.5
National Telecommunications & Information Administration	6.9	6.8	3.6	4.0	4.2	4.8	6.4	11.9	3.8	3.7	3.8
Office of the Secretary .....	.0	.0	.0	.0	.0	.0	-	-	.0	.0	.0
Department of Defense, total	3,656.1	3,529.2	3,717.9	4,073.4	4,783.5	4,240.6	4,198.4	3,995.5	3,809.8	3,879.7	4,088.9
Department of the Army	823.4	780.2	860.5	932.7	1,018.6	852.6	852.1	670.4	710.0	855.7	745.5
Department of the Navy	783.2	807.6	874.0	892.8	996.1	847.1	880.0	893.5	885.7	831.2	884.1
Department of the Air Force	807.4	776.3	830.4	790.5	887.8	814.3	834.5	882.3	816.6	738.4	783.7
Defense Agencies	1,242.1	1,165.1	1,153.0	1,457.3	1,881.0	1,726.6	1,632.0	1,549.3	1,397.5	1,454.3	1,675.7
Department of Education	122.0	130.3	131.7	127.0	133.6	136.8	138.4	135.5	138.1	155.2	203.0
Department of Energy	2,431.7	2,570.5	3,273.6	3,412.5	3,440.2	3,282.5	3,459.9	3,362.2	3,567.7	3,748.4	4,128.3
Department of Health & Human Services, total	7,088.4	7,467.1	8,162.5	7,945.5	9,192.6	9,736.4	10,076.0	10,545.9	11,228.1	12,051.8	12,981.8
Administration on Aging	NA	NA	2.9	2.5	2.7	3.5	3.0	.2	.2	2.4	1.1
Administration for Children & Families	NA	NA	13.5	34.3	18.5	10.4	11.2	12.6	17.4	20.1	32.9
Agency for Health Care Policy & Research	NA	44.2	93.0	97.8	105.6	142.0	124.0	116.0	134.1	136.9	159.7
Alcohol, Drug Abuse, & Mental Health Administration ¹	692.6	801.2	923.0	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	323.0	358.5	365.2
Food & Drug Administration	99.0	99.0	125.0	135.7	154.5	169.4	170.5	170.8	158.6	159.1	169.4
Health Care Financing Admin	49.1	49.1	69.1	75.5	68.2	80.0	74.5	52.7	43.6	50.0	50.0
Hlth Resources & Svcs Admin	10.5	11.9	11.0	10.1	9.6	10.6	12.2	11.1	13.1	13.5	13.7
Human Development Svcs	8.5	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	6,061.8	6,335.8	6,783.0	7,398.7	8,638.5	9,079.7	9,333.6	9,876.9	10,519.7	11,297.4	12,175.8
Office of the Assistant Secretary for Health	25.6	5.8	9.6	6.0	.0	.0	.0	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	8.0	11.7	9.1	9.0	18.4	14.0	14.0
Office of the Assistant Sec, Planning & Eval	NA	NA	NA	NA	NA	NA	NA	9.0	18.4	14.0	14.0
Social Security Admin	15.8	11.8	10.2	33.0	24.5	22.2	20.4	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-98a. Federal obligations for research, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Housing & Urban Dvlpmt ...	6.1	6.6	9.4	8.8	8.1	13.7	14.2	11.2	11.3	14.1	18.2
Dept of the Interior, total	441.9	475.2	553.4	570.6	580.1	650.2	532.4	542.1	552.7	583.2	608.4
Bureau of Land Management	2.0	2.1	5.9	5.9	8.0	.0	.0	.0	.0	.0	.0
Bureau of Mines	93.2	89.9	99.0	102.9	105.0	95.4	.0	NA	NA	NA	NA
Bureau of Reclamation	3.5	5.3	7.8	10.7	7.4	5.5	6.0	4.9	5.4	6.8	7.7
Geological Survey	266.9	293.2	338.4	344.5	343.9	355.4	347.9	495.1	500.7	517.5	539.3
Minerals Management Service ...	2.2	1.9	2.7	3.8	5.8	20.6	20.0	21.9	20.6	25.4	27.5
Nat'l Biological Svc	NA	NA	NA	NA	.0	149.0	138.8	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	38.1	24.2	19.7	20.2	26.0	33.5	34.0
Office of the Secretary .....	.0	.0	.1	.2	.2	.0	.0	.0	.0	.0	.0
Office of Surface Mining											
Reclamation & Enforcement ...	.7	.7	1.0	.3	.5	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	53.9	62.0	71.0	71.2	71.2	.0	.0	.0	.0	.0	.0
Department of Justice, total	17.5	19.9	21.1	20.3	25.6	25.9	25.8	32.0	32.5	44.8	47.8
Bureau of Prisons	2.1	1.8	1.9	2.5	2.5	2.1	3.2	3.1	1.9	3.2	3.3
Drug Enforcement Admin ² .....	.5	.4	.9	.1	-	.1	.0	-	-	.0	.0
Immigration & Naturalization											
Service ³ .....	.1	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	14.8	17.3	17.9	17.3	22.7	23.3	22.2	28.7	30.2	41.2	44.1
Department of Labor, total	22.2	21.6	24.3	23.8	19.0	19.6	29.9	26.7	21.7	20.6	21.2
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	6.9	7.1	14.8	13.3	12.6	12.4	12.4
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	6.1	6.0	6.6	5.6	3.5	3.1	4.2	2.6	1.5	1.6	2.0
Labor-Management Relations &											
Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	4.5	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.5	4.6
Office of the Secretary	2.5	3.3	4.7	4.1	2.9	3.1	2.9	1.8	.1	.1	.1
Pension Benefit Guaranty Corp ..	.3	.3	.4	.8	.7	.3	.1	.1	.1	.1	.1
Pension & Welfare Benefits											
Administration	1.4	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	4.7	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	1.0	1.0
Dept of Transportation, total	120.5	119.2	114.6	156.9	226.1	273.4	370.7	375.2	381.2	476.7	495.3
Coast Guard	4.6	5.1	6.4	5.0	8.2	5.6	4.9	5.0	5.7	5.6	4.8
Federal Aviation Admin	23.6	26.1	24.0	30.1	59.8	79.5	83.3	130.6	159.4	150.8	156.3
Federal Highway Admin	56.6	57.6	46.1	73.2	91.7	134.2	203.1	173.9	149.2	244.3	250.4
Federal Railroad Admin	7.5	8.5	13.2	18.9	20.9	16.1	22.5	21.3	18.2	19.3	19.5
Federal Transit Admin .....	.0	.0	.0	.0	10.9	7.8	10.9	5.6	6.0	6.2	8.4
Maritime Administration .....	.0	.9	1.7	1.8	1.7	1.7	2.5	.0	.0	.0	.0
National Highway Traffic											
Safety Administration	26.2	16.9	21.4	25.8	31.6	25.3	39.7	33.2	36.4	42.4	51.4
Office of the Secretary	1.3	1.7	.6	.7	.6	.6	.6	.0	.0	.0	.0
Research & Special Programs											
Administration .....	.7	2.4	1.4	1.4	.5	2.6	3.2	5.6	6.3	8.0	4.5
Dept of the Treasury, total	16.3	18.7	24.1	20.8	11.1	9.2	48.9	50.5	50.9	62.7	63.9
Bureau of Engraving &											
Printing	1.4	1.4	2.7	1.8	3.2	1.6	1.3	1.6	1.6	1.8	1.8
Internal Revenue Svc	14.1	16.5	17.5	17.5	6.5	6.1	45.8	47.5	47.9	58.9	60.0
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴ .....	.4	.4	.5	.2	.1	.5	.7	.5	.4	.6	.6
US Secret Service .....	.4	.5	.4	.5	.6	.5	.5	.5	.4	.6	.8
Department of Veterans Affairs	213.7	215.6	193.8	200.9	207.4	223.5	218.8	235.3	231.0	276.6	275.2

See explanatory information, if any, and SOURCE at end of table.

**Table C-98a. Federal obligations for research, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.1	1.5	1.7	1.7	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm .....	.5	.4	.9	.8	.8	.1	.0	.0	.1	.2	.2
Environmental Protection Agcy	273.3	315.2	353.1	404.3	361.5	402.3	401.6	380.8	409.1	507.0	510.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation Agency, total	219.1	305.2	357.4	300.1	359.2	216.2	272.7	205.0	176.7	142.7	135.7
Agency for International Development ⁵	219.1	305.2	357.4	300.1	359.2	216.2	272.7	205.0	176.7	142.7	135.7
Library of Congress	1.6	1.5	1.7	1.8	1.8	1.9	2.1	2.2	.8	.7	.7
Nat'l Aero & Space Admin ⁶	2,878.8	3,060.7	3,371.2	3,229.3	3,548.7	3,840.6	4,046.1	3,878.0	4,184.9	4,729.2	4,343.5
Nat'l Archives & Records Admin .....	.2	.3	.6	.6	.3	.3	.1	.1	.1	.1	.1
National Science Foundation	1,670.4	1,689.5	1,785.2	1,868.4	1,881.9	2,040.4	2,149.3	2,188.3	2,248.5	2,356.9	2,654.8
Nuclear Regulatory Commission	114.8	108.8	108.8	119.0	119.8	90.7	88.2	70.9	62.1	50.7	52.8
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Institution	80.2	84.0	98.0	98.0	102.0	124.2	124.0	127.0	130.0	134.0	142.0
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	14.6	21.7	18.8	24.4	27.9	25.9	26.4	4.2	4.0	.6	.0
United States Arms Control & Disarmament Agency	1.2	.2	.4	2.1	1.5	1.3	1.1	.7	1.2	.8	.8
US Information Agency .....	.0	.5	.1	.0	1.1	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-99. Federal obligations for basic research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	3,698.6	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6
Departments:											
Dept of Agriculture, total	242.7	256.4	275.7	314.1	330.8	362.0	392.6	445.4	432.9	445.5	480.6
Agricultural Research Svc	NA	NA	NA	186.4	192.9	215.3	240.6	250.2	247.7	253.4	271.1
Cooperative State Research, Ed, & Extension Service	NA	NA	NA	83.9	91.3	98.8	99.6	141.5	131.7	132.8	145.8
Economic Research Service	NA	NA	NA	3.6	3.9	3.9	4.4	4.6	4.5	6.3	6.7
Economics, Stat, & Coop Svc	3.9	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	6.6	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	30.8	31.4	33.7	38.1	38.7	38.8	41.2	44.1	42.2	49.4	51.6
Nat'l Agri Statistics Svc	NA	NA	NA	.0	2.3	2.5	2.7	2.8	2.6	1.1	1.2
Office of International Cooperation & Development ...	NA	.0	2.3	1.7	1.1	2.3	3.6	1.5	3.7	1.9	3.6
Office of Transportation	NA	.0	.0	.5	.5	.5	.6	.6	.5	.5	.5
Science & Ed Admin, total	207.9	218.6	233.0	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	142.4	148.2	157.8	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	65.6	70.5	75.2	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	11.8	11.9	15.9	16.2	16.9	19.2	20.6	23.2	26.5	25.8	30.9
Bureau of the Census .....	.5	.6	.5	.4	.3	.3	.4	.4	.5	.7	1.3
Economic Development Admin ...	2.7	.5	.3	.2	.0	.5	.0	.0	.0	.0	.0
Maritime Administration	2.7	2.0	2.0	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	5.9	8.8	12.8	15.6	16.5	18.4	20.2	22.1	25.7	25.1	26.3
National Oceanic & Atmospheric Administration ....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2
Office of the Secretary .....	.0	.0	.3	.0	-	-	.0	.8	.3	.0	.0
Department of Defense, total	410.4	471.5	540.3	604.3	686.7	785.6	847.9	861.4	923.9	907.6	876.9
Department of the Army	104.1	115.0	132.2	148.1	187.7	208.3	222.1	240.8	248.5	217.0	165.7
Department of the Navy	172.1	192.1	214.9	238.0	280.3	305.4	315.8	343.1	337.3	354.3	341.8
Department of the Air Force	95.1	105.0	108.2	125.8	145.8	164.2	192.4	198.3	216.5	221.6	196.4
Defense Agencies	39.1	59.3	85.1	92.4	72.9	107.7	117.6	79.2	121.7	114.8	173.0
Department of Education	NA	20.6	17.6	.0	14.2	14.2	12.2	14.6	4.5	3.1	4.4
Department of Energy	440.5	463.0	523.1	586.3	642.2	767.7	830.4	942.6	959.7	1,068.5	1,184.8
Dept of Health, Education, & Welfare, total	1,292.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	79.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin .....	.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	18.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	1,181.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-99. Federal obligations for basic research, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 3

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Health & Human Services, total	NA	1,576.0	1,762.7	1,900.4	2,144.7	2,475.4	2,814.5	3,232.5	3,338.8	3,827.9	4,081.4
Alcohol, Drug Abuse, & Mental Health Administration	NA	94.6	104.7	116.3	117.3	145.0	170.8	196.8	203.4	232.2	265.8
Hlth Resources & Svcs Admin	NA	NA	NA	NA	.6	.8	.8	.9	1.0	1.3	1.1
Health Services Admin	NA	2.0	2.0	3.8	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	.0	.0	.4	.4	.0	.0	.0	.0	.0	.0
National Insts of Health	NA	1,463.7	1,642.3	1,766.8	2,020.7	2,313.0	2,624.8	3,018.0	3,118.6	3,575.5	3,795.1
Office of the Assistant Secretary for Health	NA	13.6	11.6	12.4	5.7	16.6	18.1	16.9	15.8	18.9	19.4
Office of the Secretary	NA	2.1	2.0	.6	.0	.0	.0	.0	.0	.0	.0
Dept of the Interior, total	65.9	72.5	71.6	80.7	76.5	103.0	125.9	138.3	133.0	134.9	126.5
Bonneville Power Admin .....	.0	.0	.0	.4	NA	NA	NA	NA	NA	NA	NA
Bureau of Mines	8.6	13.7	11.5	13.6	15.9	23.5	40.5	49.9	44.9	45.6	32.1
Bureau of Reclamation .....	.2	.1	.2	.1	.1	.1	.1	.3	.1	.1	.1
Geological Survey	46.3	49.0	47.3	53.5	52.6	64.7	78.9	80.5	83.4	84.9	89.5
Office of the Secretary	1.7	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.0
Office of Water Rsch & Tech	4.6	4.6	6.6	7.6	3.3	.5	.4	NA	NA	NA	NA
US Fish & Wildlife Service	4.5	3.7	3.8	3.9	4.1	6.9	5.9	5.7	3.6	4.3	4.8
Department of Justice, total	14.7	7.9	9.5	4.6	3.1	3.6	4.7	4.2	5.3	8.1	7.6
Office of Justice Programs	14.7	7.9	9.5	4.6	3.1	3.6	4.7	4.2	5.3	8.1	7.6
Department of Labor, total	3.7	2.3	3.9	3.7	6.5	5.3	5.0	3.3	.9	1.4	.4
Employment & Training Admin	3.5	1.8	3.9	3.7	6.5	5.3	5.0	3.3	.9	1.4	.4
Labor-Management Services Administration .....	.2	.5	.0	.0	.0	.0	NA	NA	NA	NA	NA
Department of State, total .....	.0	-	.0	.0	.0	.0	.0	.0	.0	2.6	3.1
Departmental Funds .....	.0	-	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total .....	.0	.0	.0	1.2	1.0	.9	3.5	1.1	.6	.2	.0
Coast Guard .....	.0	.0	.0	.3	.0	.4	.0	.0	.0	.0	.0
Maritime Administration	NA	NA	NA	.7	1.0	.5	3.5	1.1	.6	.2	.0
Research & Special Programs Administration .....	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
Dept of the Treasury, total .....	.0	.2	1.7	2.3	2.2	3.5	4.0	4.8	5.1	4.7	4.8
Bureau of Engraving & Printing .....	.0	.0	.0	.0	.0	.6	.8	.3	.4	.1	.1
Internal Revenue Service .....	.0	.2	1.7	2.3	2.2	2.9	3.2	4.4	4.5	4.4	4.7
United States Secret Service	NA	NA	.0	.0	.0	.0	.0	.0	.2	.2	.1
Department of Veterans Affairs	8.9	9.5	14.3	15.0	12.9	14.1	15.8	15.4	14.8	17.2	17.3
Other agencies:											
Consumer Product Safety Comm .....	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agcy	6.0	10.1	13.6	10.5	32.7	22.2	29.6	38.6	38.5	31.1	27.2
Federal Emergency Management Agency, total	2.8	3.0	2.6	2.6	1.4	.0	.0	.0	.0	.0	.0
National Fire Prevention & Control Administration	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission .....	.5	.4	1.5	.9	1.0	1.2	1.3	1.5	1.6	.0	.0
Foundation for Ed Assistance	NA	NA	NA	20.6	NA	NA	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-99. Federal obligations for basic research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
General Services Admin	1.8	-	.0	.0	.0	.0	0.1	0.1	.0	.0	.0
International Development Cooperation Agency, total	NA	.0	.0	.0	.0	4.1	3.0	1.7	4.3	2.8	3.0
Agcy for Internat'l Dvlpmnt	NA	.0	.0	.0	.0	4.1	3.0	1.7	4.3	2.8	3.0
Library of Congress .....	.1	0.1	0.1	0.2	0.1	.3	.6	.6	.4	.4	.4
Nat'l Aero & Space Admin	479.7	512.8	559.1	531.1	535.7	617.0	754.5	750.9	916.7	1,013.7	1,112.7
National Archives & Records Administration	NA	NA	NA	NA	NA	NA	NA	.1	.0	.5	.2
National Science Foundation	678.0	733.3	815.2	896.6	916.1	999.1	1,132.3	1,261.8	1,275.2	1,371.2	1,433.2
Smithsonian Institution	34.9	36.9	41.0	44.9	52.4	56.0	63.6	71.1	63.3	71.5	75.1
Tennessee Valley Authority	3.8	4.1	4.6	4.8	4.6	5.6	5.1	5.5	7.3	3.9	3.2
US Information Agency .....	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-99a. Federal obligations for basic research, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 2

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	10,602.0	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,942.2	15,861.5	16,913.8
Departments:											
Dept of Agriculture, total	484.9	519.2	557.6	595.2	615.9	606.3	595.0	550.0	590.1	598.0	608.8
Agricultural Marketing Svc .....	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
Agricultural Research Svc	282.7	294.0	309.7	326.1	341.0	366.5	369.0	364.6	364.4	373.9	390.6
Cooperative State Research, Ed, & Extension Svc	142.6	153.7	170.4	189.6	192.5	194.7	186.0	148.7	189.9	185.3	181.0
Economic Research Service	6.9	7.1	7.6	8.2	10.6	9.9	5.4	5.3	5.3	7.2	5.6
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	.7	.5	.9	.9	.9	.9
Forest Service	50.0	60.3	66.6	68.9	69.4	33.3	32.9	29.3	28.4	29.6	29.6
Nat'l Agri Statistics Svc	1.0	.9	1.1	1.2	1.3	1.3	1.3	1.2	1.1	1.1	1.1
Office of International Cooperation & Dvlpmnt	1.7	2.6	2.2	1.2	1.2	.0	NA	NA	NA	NA	NA
Department of Commerce, total	29.1	31.4	34.3	34.5	37.2	40.1	39.3	37.5	39.2	40.8	42.8
Bureau of the Census	1.2	2.8	2.4	.9	.4	.3	.3	.9	1.1	1.1	1.9
National Institute of Standards & Technology	27.9	28.6	31.9	33.6	36.5	39.8	38.9	36.7	38.2	39.6	40.9
National Oceanic & Atmospheric Administration .....	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
Department of Defense, total	947.9	947.6	994.2	1,098.9	1,268.2	1,200.7	1,248.3	1,137.9	1,022.9	1,015.7	1,106.4
Department of the Army	187.2	185.1	188.6	204.9	215.7	213.3	218.8	195.1	178.3	177.8	204.1
Department of the Navy	354.0	365.0	388.0	393.8	422.0	400.1	409.4	376.7	347.2	321.5	361.2
Department of the Air Force	202.8	197.0	209.2	205.8	218.7	242.4	206.8	227.9	188.1	183.9	202.9
Defense Agencies	203.9	200.5	208.3	294.4	411.8	344.9	413.3	338.2	309.2	332.5	338.2
Department of Education	4.4	4.9	8.6	7.5	5.3	5.5	5.5	3.5	3.0	5.3	8.2
Department of Energy	1,410.9	1,504.8	1,686.5	1,736.4	1,754.8	1,603.2	1,634.4	1,929.7	1,970.9	2,077.4	2,226.6
Department of Health & Human Services, total	4,388.0	4,649.0	5,050.1	5,058.7	5,696.7	5,884.0	6,061.1	6,504.6	6,851.8	7,361.0	7,977.1
Agency for Health Care Policy & Research	NA	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0
Alcohol, Drug Abuse, & Mental Health Administration ¹	308.0	386.2	459.1	NA	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	1.2	1.2	1.5	1.3	1.1	.8	1.0	1.0	1.1	1.1	1.2
National Insts of Health ¹	4,053.3	4,261.7	4,589.5	5,057.4	5,695.6	5,882.4	6,060.0	6,503.6	6,850.7	7,359.9	7,976.0
Office of the Assistant Secretary for Health	25.6	.0	.0	.0	.0	.0	.0	NA	NA	NA	NA
Dept of the Interior, total	188.9	205.4	229.3	230.9	230.3	83.2	55.2	56.0	56.4	57.1	66.2
Bureau of Land Management .....	.0	.0	1.1	.6	.6	.0	.0	.0	.0	.0	.0
Bureau of Mines	43.9	40.6	42.8	43.7	44.6	25.4	.0	NA	NA	NA	NA
Bureau of Reclamation	-	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
Geological Survey	140.2	159.1	179.1	180.1	178.0	43.5	41.6	55.5	55.9	56.6	65.7
Nat'l Biological Svc	NA	NA	NA	NA	.0	13.7	13.0	NA	NA	NA	NA
National Park Service .....	.0	.0	.0	.0	.6	.7	.5	.5	.5	.5	.5
US Fish & Wildlife Service	4.8	5.6	6.2	6.4	6.4	.0	.0	.0	.0	.0	.0
Department of Justice, total	6.8	8.8	6.4	5.3	5.0	5.9	8.1	12.6	12.4	18.6	26.0
Office of Justice Programs	6.8	8.8	6.4	5.3	5.0	5.9	8.1	12.6	12.4	18.6	26.0
Department of Labor, total .....	.3	.3	.3	.2	5.6	5.8	13.3	11.5	11.3	11.1	11.1
Bureau of Labor Statistics .....	.0	.0	.0	.0	5.4	5.6	13.3	11.5	11.3	11.1	11.1
Employment & Training Admin .....	.3	.3	.3	.2	.2	.0	.0	.0	.0	.0	.0
Pension Benefit Guaranty Corp .....	.0	.0	.0	-	.0	.0	.0	.0	.0	.0	.0
Department of State	3.4	3.5	4.6	4.9	4.8	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-99a. Federal obligations for basic research, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Transportation, total .....	.0	.0	.0	1.2	1.7	3.0	46.9	38.4	37.5	59.1	55.8
Federal Highway Admin .....	.0	.0	.0	1.2	1.7	3.0	46.9	38.4	37.5	59.1	55.8
Dept of the Treasury, total	3.4	3.4	3.6	3.6	6.5	-	-	-	-	-	-
Bureau of Engraving & Printing .....	.5	.0	.0	.0	.0	-	-	-	-	-	-
Internal Revenue Svc	2.9	3.4	3.6	3.6	6.5	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	16.6	16.2	16.1	15.7	13.3	14.4	12.4	12.5	13.6	14.1	15.5
Other agencies:											
Environmental Protection Agcy	50.7	73.6	91.2	110.4	89.1	101.4	70.3	51.7	51.1	57.0	57.0
International Development Cooperation Agency, total	3.1	5.0	5.7	5.8	8.4	1.8	2.3	2.0	.1	1.3	1.1
Agency for International Development ²	3.1	5.0	5.7	5.8	8.4	1.8	2.3	2.0	.1	1.3	1.1
Library of Congress .....	.4	.3	.4	.4	.3	.4	.5	.5	.3	.2	.2
Nat'l Aero & Space Admin ³	1,417.4	1,636.9	1,705.6	1,738.2	1,800.1	1,963.9	1,978.2	1,980.9	2,094.8	2,245.6	2,126.6
Nat'l Archives & Records Admin .....	.1	.2	.4	.5	.2	.2	.0	.0	.0	.0	.0
National Science Foundation	1,562.6	1,586.3	1,676.2	1,741.5	1,743.8	1,870.7	1,973.3	2,007.4	2,056.7	2,165.2	2,442.3
Smithsonian Institution	80.2	84.0	98.0	98.0	102.0	124.2	124.0	127.0	130.0	134.0	142.0
Tennessee Valley Authority ⁴	2.9	4.7	1.9	2.1	9.9	8.9	9.0	.3	.0	.0	.0

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

³ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁴ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-100. Federal obligations for applied research, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 4

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	5,908.2	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5
Departments:											
Dept of Agriculture, total	351.8	375.5	381.8	426.9	435.7	455.5	442.2	465.6	463.5	473.4	504.6
Agricultural Cooperative Svc	NA	NA	1.6	1.7	1.7	2.1	2.2	2.9	2.6	2.7	2.7
Agricultural Marketing Svc .....	.0	.4	1.0	.9	1.0	1.1	1.2	1.3	1.3	1.2	1.3
Agricultural Research Svc	NA	NA	NA	181.5	186.2	202.6	183.7	191.8	188.3	201.1	208.2
Animal & Plant Health Inspection Service .....	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6
Cooperative State Research, Ed, & Extension Service	NA	NA	NA	115.5	127.7	133.5	136.2	142.8	137.4	138.0	152.6
Economic Research Service	NA	NA	NA	35.8	35.3	34.9	39.3	41.7	40.1	38.5	41.4
Economics, Stat, & Coop Svc	28.8	29.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Economics & Statistics Svc	NA	NA	24.5	NA	NA	NA	NA	NA	NA	NA	NA
Forest Service	69.8	71.1	72.3	81.8	69.0	65.1	63.9	65.7	67.5	73.5	79.9
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.8	.6	.7	.6
Human Nutrition Info Svc	NA	NA	NA	.0	8.5	8.2	6.0	6.7	12.8	6.8	8.2
Nat'l Agri Statistics Svc	NA	NA	NA	7.5	4.7	5.1	5.5	5.6	5.4	2.3	2.4
Office of International Cooperation & Development ...	NA	.0	2.6	1.9	1.2	2.5	3.9	5.8	2.9	3.3	1.2
Office of Transportation	NA	.0	.0	.3	.3	.3	.3	.5	.4	.4	.4
Science & Ed Admin, total	253.2	274.8	279.8	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	161.3	172.7	170.8	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative State Rsch Svc ...	91.9	102.1	109.0	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	181.0	207.6	238.5	233.2	259.2	265.6	276.1	301.0	312.9	312.8	311.5
Bureau of the Census	1.8	1.2	1.4	2.6	1.6	1.9	2.0	2.1	2.1	2.1	2.4
Economic Development Admin ...	3.2	8.0	2.2	1.6	1.6	4.8	5.1	2.0	2.3	5.0	4.2
Maritime Administration	4.3	10.2	10.1	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	42.6	43.0	46.1	50.6	57.4	63.1	63.5	64.5	63.5	64.3	72.6
National Oceanic & Atmospheric Administration	127.9	142.7	168.8	168.5	188.5	188.9	197.7	224.4	237.5	234.4	225.0
National Telecommunications & Information Administration	1.1	2.4	9.6	9.9	10.1	6.9	7.7	7.9	7.6	7.0	7.3
Office of the Secretary .....	.0	.1	.2	.0	.0	.0	-	.1	.0	-	.0
Department of Defense, total	1,413.6	1,542.6	1,721.4	1,996.6	2,266.1	2,437.0	2,200.7	2,306.9	2,303.3	2,440.0	2,362.2
Department of the Army	305.7	333.6	347.1	388.4	451.6	485.3	486.7	582.6	578.8	692.9	588.0
Department of the Navy	354.2	375.2	396.2	460.0	498.4	521.6	449.6	448.2	447.1	432.5	406.0
Department of the Air Force	353.6	387.2	429.1	491.5	488.1	524.2	547.7	538.4	542.5	563.2	576.7
Defense Agencies	392.5	446.6	549.1	656.7	828.1	905.9	716.6	737.7	735.0	751.3	791.5
Def Civil Preparedness Agcy	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Education	NA	72.8	70.0	.0	56.3	61.9	68.7	77.3	91.3	103.8	106.6

See explanatory information, if any, and SOURCE at end of table.

**Table C-100. Federal obligations for applied research, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 4

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Energy	661.7	668.9	754.2	827.3	1,053.9	1,193.4	1,194.5	1,198.4	1,080.7	1,029.4	1,050.6
Dept of Health, Education, & Welfare, total	1,448.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	98.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Disease Control	60.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Food & Drug Administration	64.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Care Financing Admin	19.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	16.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	1,051.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off of Asst Sec for Education	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	27.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	13.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	42.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Secretary	25.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	12.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Health & Human Services, total	NA	1,439.7	1,570.1	1,591.9	1,460.9	1,545.4	1,651.5	1,795.8	1,850.8	2,194.0	2,415.6
Alcohol, Drug Abuse, & Mental Health Administration	NA	118.9	128.8	121.4	128.7	155.4	165.2	179.7	191.5	241.1	286.6
Centers for Disease Control & Prevention	NA	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7
Food & Drug Administration	NA	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0
Health Care Financing Admin	NA	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2
Health Resources Admin	NA	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin	NA	NA	NA	NA	6.1	10.2	15.4	17.3	11.2	8.0	9.0
Health Services Admin	NA	8.2	6.0	6.4	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	14.9	19.1	39.5	8.3	6.9	4.5	5.8	6.8	9.4	7.1
National Insts of Health	NA	1,066.4	1,145.1	1,181.5	1,103.8	1,165.2	1,285.6	1,410.1	1,469.0	1,739.1	1,885.6
Office of the Assistant Secretary for Health	NA	16.3	14.1	16.3	8.2	.0	.0	.0	.0	.0	.0
Office of the Secretary	NA	22.6	22.0	18.9	13.1	14.4	10.0	9.4	6.1	8.2	4.7
Social Security Admin	NA	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7
Dept of Housing & Urban Dvlpmnt ...	30.5	23.8	19.6	16.7	10.3	11.3	6.3	6.5	5.3	5.5	6.3
Dept of the Interior, total	217.6	266.9	282.8	289.2	275.0	254.7	254.3	231.0	234.9	247.3	266.0
Bonneville Power Admin .....	.0	.0	.0	6.1	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	1.0	1.1	1.3	1.5	2.4	2.0	1.8	2.8	2.1	2.1	2.2
Bureau of Mines	48.4	65.4	71.3	54.4	65.2	55.9	56.7	36.7	36.6	39.6	54.1
Bureau of Reclamation	10.4	11.3	12.7	13.3	8.9	8.7	8.8	10.9	9.6	10.1	3.6
Geological Survey	87.4	96.1	98.5	115.8	99.4	89.9	125.1	130.0	127.8	131.7	135.8
Minerals Management Service ...	NA	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2
National Park Service	7.7	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4
Office of the Secretary .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
Office of Surface Mining Reclamation & Enforcement ...	2.2	5.0	7.5	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0
Office of Water Rsch & Tech	10.8	13.2	11.8	8.2	6.8	.8	3.2	NA	NA	NA	NA
US Fish & Wildlife Service	49.7	65.9	71.4	73.9	79.6	80.6	42.3	32.2	38.1	43.3	48.7
Department of Justice, total	31.0	20.9	19.2	14.9	13.2	17.1	13.2	15.1	17.0	11.8	9.8
Bureau of Prisons .....	.7	.5	.9	1.7	.9	1.3	1.2	1.1	2.7	2.2	2.1
Drug Enforcement Admin .....	.5	.7	.8	.4	1.3	.9	.7	.5	.8	.7	.6
Immigration & Naturalization Service .....	.2	.1	.2	.1	.3	.3	.3	.2	.2	.2	.3
Office of Justice Programs	28.6	18.0	16.1	12.0	10.3	14.4	11.0	13.0	13.2	8.6	6.8
Office of Legal Policy	1.1	1.6	1.3	.7	.4	.2	.0	.3	.2	.1	.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-100. Federal obligations for applied research, by agency:
fiscal years 1978-88**

[Dollars in millions]

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Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Labor, total	22.0	39.8	32.6	54.5	10.6	12.7	11.2	9.1	8.7	19.0	26.4
Bureau of Labor Statistics .....	.8	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0
Employment Standards Admin ...	3.7	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1
Employment & Training Admin ...	11.4	24.2	16.2	45.1	2.1	2.6	1.0	.3	2.6	4.0	6.5
Labor-Management Relations & Cooperative Programs	NA	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4
Labor-Management Services											
Administration	2.6	2.7	2.8	1.8	.7	.9	NA	NA	NA	NA	NA
Occupational Safety & Health Administration	1.3	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2
Office of the Secretary	2.2	1.6	1.4	1.1	.9	1.5	1.9	1.7	1.3	1.8	5.2
Pension Benefit Guaranty Corp ..	NA	NA	NA	.1	.3	.3	.3	.2	.1	.3	.3
Pension & Welfare Benefits Administration	NA	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7
Department of State, total	49.1	2.6	2.0	1.6	1.5	1.5	1.6	1.5	1.5	.3	1.0
Agcy for Internat'l Dvlpmt	46.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	2.5	2.6	2.0	1.6	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	66.5	67.0	82.4	87.4	65.7	71.7	74.2	70.2	67.6	68.6	91.2
Coast Guard	2.3	10.9	8.1	14.7	1.7	.8	7.2	5.4	3.5	3.7	5.4
Federal Aviation Admin	6.8	7.5	8.2	8.2	7.0	12.5	15.0	17.3	14.0	11.1	13.3
Federal Highway Admin	4.9	4.4	4.6	5.1	5.3	7.3	6.1	6.3	14.7	20.7	43.7
Federal Railroad Admin	9.2	7.5	7.9	6.2	3.1	2.8	12.3	11.4	12.5	10.4	8.2
Federal Transit Admin	1.1	1.1	8.9	9.3	19.4	18.3	1.0	.5	.0	.0	.0
Maritime Administration	NA	NA	NA	8.9	5.6	5.7	5.1	7.0	6.2	3.1	.5
National Highway Traffic Safety Administration	38.0	30.0	38.6	29.4	21.3	21.4	24.7	20.9	16.1	18.9	19.1
Office of the Secretary	4.1	.6	.6	.7	.3	.3	.9	.9	.4	.4	.7
Research & Special Programs Administration .....	.1	5.0	5.5	4.9	2.1	2.6	1.8	.5	.3	.2	.4
Dept of the Treasury, total	4.1	4.5	4.0	2.9	5.9	6.7	6.6	13.6	12.7	12.7	11.1
Bureau of Alcohol, Tobacco, & Firearms .....	.4	.7	.3	.1	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	1.9	.6	1.3	.9	2.8	1.4	1.4	3.1	2.7	2.7	1.1
Internal Revenue Service	1.8	3.3	2.2	1.8	3.1	5.0	4.9	10.2	9.5	9.7	9.0
US Customs Service .....	.0	.0	.1	.1	-	.0	.1	.1	.2	.2	.7
United States Secret Service	NA	NA	.0	.0	.0	.3	.1	.2	.2	.1	.3
Department of Veterans Affairs	90.5	101.8	103.6	112.7	110.1	132.0	156.1	193.7	155.1	173.1	178.8
Other agencies:											
ACTION .....	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Advisory Commission on Intergovernmental Relations	1.7	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8
Appalachian Regional Comm .....	.3	.7	.6	.3	.3	.2	.4	.2	.2	.1	.2
Community Services Admin	2.0	1.8	1.3	1.9	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	.9	1.8	1.6	.2	.1	.3	1.1	1.4	1.1	.6	.1
Environmental Protection Agcy	246.7	248.9	231.5	207.8	210.7	152.4	142.3	176.0	179.3	246.1	240.7
Fed Communications Comm	2.4	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2
Federal Emergency Management Agency, total	1.9	6.7	6.7	6.4	7.8	3.3	6.1	2.9	.0	.0	.0
National Fire Prevention & Control Administration	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission .....	.9	1.1	1.5	.2	.2	.2	.2	.3	.3	.5	.4
Foundation for Ed Assistance	NA	NA	NA	33.2	NA	NA	NA	NA	NA	NA	NA
General Services Admin .....	.4	.1	.1	.4	.5	.2	.4	.3	.9	1.6	2.3

See explanatory information, if any, and SOURCE at end of table.

**Table C-100. Federal obligations for applied research, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 4 of 4

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
International Development											
Cooperation Agency, total	NA	66.9	79.7	86.4	127.9	152.6	164.0	158.1	180.7	151.2	132.1
Agcy for Internat'l Dvlpmt	NA	66.9	79.7	86.4	127.9	152.6	164.0	158.1	180.7	151.2	132.1
Interstate Commerce Comm	0.3	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
Library of Congress .....	.4	.5	.5	.7	.7	1.0	1.5	1.5	1.1	1.1	1.2
Nat'l Aero & Space Admin	865.4	938.4	1,050.5	876.0	871.4	927.8	954.7	1,032.7	1,152.3	1,255.5	1,218.9
National Archives & Records											
Administration	NA	NA	NA	NA	NA	NA	NA	.1	.0	.3	.3
National Science Foundation	65.5	66.8	58.4	58.9	57.1	62.9	70.5	83.8	78.1	99.3	99.6
Nuclear Regulatory Commission	133.9	148.8	182.7	219.7	220.3	207.3	190.7	150.0	123.8	122.5	108.5
Office of Personnel Management ...	1.0	1.4	2.6	3.4	.0	.0	.0	.0	.0	.0	.0
Office of Thrift Supervision	1.0	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4
Tennessee Valley Authority	9.7	12.4	11.2	9.4	8.1	6.7	9.2	8.9	10.5	13.8	15.3
United States Arms Control &											
Disarmament Agency	2.5	2.7	3.0	1.6	1.3	.8	1.2	1.1	.9	.4	.8
US Information Agency .....	.1	.1	.1	1.0	.0	-	1.4	.1	1.6	.0	.1
US Internat'l Trade Comm	3.1	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-100a. Federal obligations for applied research, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 3

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	10,163.5	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,609.0	16,078.6
Departments:											
Dept of Agriculture, total	517.3	542.1	617.9	665.8	635.8	716.2	703.8	670.0	700.0	741.3	711.8
Agricultural Cooperative Svc	2.8	2.7	2.8	3.4	2.9	3.7	NA	NA	NA	NA	NA
Agricultural Marketing Svc	1.3	1.7	3.7	4.1	4.1	4.2	4.2	4.2	4.2	4.1	4.2
Agricultural Research Svc	209.4	218.2	241.1	257.1	233.3	257.9	259.6	256.6	261.3	280.5	293.0
Animal & Plant Health											
Inspection Service	7.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Cooperative State Research,											
Ed. & Extension Svc	164.7	170.5	206.4	228.6	226.2	234.3	231.7	213.7	243.6	243.5	214.7
Economic Research Service	42.6	43.5	46.8	50.6	48.3	45.3	48.4	47.7	47.7	64.4	50.3
Foreign Agricultural Svc .....	.0	.0	.0	.0	.0	.4	.4	.4	.5	.5	.5
Forest Service	77.5	93.5	103.6	106.9	107.8	156.5	154.8	143.0	137.4	142.9	142.9
Grain Inspection Packers &											
Stockyards Administration .....	.8	.2	.7	1.5	1.8	1.8	.3	.5	.6	.6	.6
Human Nutrition Info Svc	8.4	9.0	9.9	10.7	8.4	7.0	NA	NA	NA	NA	NA
Nat'l Agri Statistics Svc	1.9	1.9	2.2	2.4	2.6	2.6	2.7	2.5	2.3	2.3	2.3
Office of International											
Cooperation & Dvlpmnt .....	.6	.9	.7	.4	.4	.0	NA	NA	NA	NA	NA
Rural Business-Coop Svc	NA	NA	NA	NA	NA	2.4	1.6	1.4	2.5	2.5	3.4
Department of Commerce, total	321.9	345.6	415.4	561.4	544.9	678.2	853.1	813.1	768.8	784.9	806.7
Bureau of the Census	1.8	2.1	2.3	2.4	2.9	2.5	2.6	1.6	2.4	2.5	4.2
Economic Development Admin	1.0	1.2	1.4	.5	.0	.6	.5	.6	.6	.6	.6
National Institute of											
Standards & Technology	77.6	83.2	92.5	115.8	136.4	167.5	333.1	318.2	293.3	265.5	307.7
National Oceanic &											
Atmospheric Administration	234.6	252.4	315.6	438.7	401.4	502.7	510.4	480.8	468.8	512.6	490.5
National Telecommunications &											
Information Administration	6.9	6.8	3.6	4.0	4.2	4.8	6.4	11.9	3.8	3.7	3.8
Office of the Secretary .....	.0	.0	.0	.0	.0	.0	-	-	.0	.0	.0
Department of Defense, total	2,708.2	2,581.6	2,723.8	2,974.5	3,515.2	3,040.0	2,950.1	2,857.6	2,786.9	2,863.9	2,982.5
Department of the Army	636.3	595.2	671.9	727.8	802.8	639.3	633.3	475.3	531.7	678.0	541.4
Department of the Navy	429.2	442.6	486.0	499.0	574.1	447.0	470.5	516.8	538.5	509.7	522.8
Department of the Air Force	604.6	579.3	621.2	584.7	669.1	571.9	627.7	654.4	628.5	554.6	580.7
Defense Agencies	1,038.1	964.6	944.7	1,162.9	1,469.2	1,381.7	1,218.6	1,211.1	1,088.2	1,121.8	1,337.5
Department of Education	117.5	125.3	123.1	119.5	128.3	131.2	132.8	132.1	135.0	149.9	194.8
Department of Energy	1,020.8	1,065.7	1,587.2	1,676.1	1,685.4	1,679.2	1,825.6	1,432.5	1,596.8	1,671.0	1,901.6
Department of Health & Human											
Services, total	2,700.4	2,818.1	3,112.4	2,886.8	3,495.9	3,852.5	4,014.9	4,041.3	4,376.3	4,690.8	5,004.6
Administration on Aging	NA	NA	2.9	2.5	2.7	3.5	3.0	.2	.2	2.4	1.1
Administration for Children &											
Families	NA	NA	13.5	34.3	18.5	10.4	11.2	12.6	17.4	20.1	32.9
Agency for Health Care Policy											
& Research	NA	44.2	93.0	97.8	105.6	141.2	124.0	116.0	134.1	136.9	159.7
Alcohol, Drug Abuse, & Mental											
Health Administration ¹	384.7	415.0	463.9	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control &											
Prevention	117.8	95.6	113.4	146.9	162.5	206.8	317.4	296.7	323.0	358.5	365.2
Food & Drug Administration	99.0	99.0	125.0	135.7	154.5	169.4	170.5	170.8	158.6	159.1	169.4
Health Care Financing Admin	49.1	49.1	69.1	75.5	68.2	80.0	74.5	52.7	43.6	50.0	50.0
Hlth Resources & Svcs Admin	9.3	10.7	9.5	8.8	8.5	9.8	11.2	10.1	12.1	12.4	12.5
Human Development Svcs	8.5	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	2,008.5	2,074.1	2,193.5	2,341.3	2,942.9	3,197.4	3,273.6	3,373.3	3,669.0	3,937.5	4,199.8
Office of the Assistant											
Secretary for Health .....	.0	5.8	9.6	6.0	.0	.0	.0	NA	NA	NA	NA
Off of the Secretary, total	7.8	5.0	8.8	5.0	8.0	11.7	9.1	9.0	18.4	14.0	14.0
Office of the Assistant											
Sec. Planning & Eval	NA	NA	NA	NA	NA	NA	NA	9.0	18.4	14.0	14.0
Social Security Admin	15.8	11.8	10.2	33.0	24.5	22.2	20.4	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-100a. Federal obligations for applied research, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 2 of 3

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Housing & Urban Dvlpmt ...	6.1	6.6	9.4	8.8	8.1	13.7	14.2	11.2	11.3	14.1	18.2
Dept of the Interior, total	253.0	269.8	324.1	339.7	349.8	566.9	477.3	486.0	496.2	526.1	542.2
Bureau of Land Management	2.0	2.1	4.8	5.3	7.4	.0	.0	.0	.0	.0	.0
Bureau of Mines	49.3	49.3	56.2	59.2	60.4	70.0	.0	NA	NA	NA	NA
Bureau of Reclamation	3.5	5.2	7.7	10.7	7.4	5.5	6.0	4.9	5.4	6.8	7.7
Geological Survey	126.8	134.2	159.3	164.3	165.9	311.9	306.2	439.5	444.8	461.0	473.6
Minerals Management Service ...	2.2	1.9	2.7	3.8	5.8	20.6	20.0	21.9	20.6	25.4	27.5
Nat'l Biological Svc	NA	NA	NA	NA	.0	135.4	125.8	NA	NA	NA	NA
National Park Service	19.4	20.1	27.5	31.1	37.5	23.6	19.2	19.7	25.5	33.0	33.4
Office of the Secretary .....	.0	.0	.1	.2	.2	.0	.0	.0	.0	.0	.0
Office of Surface Mining											
Reclamation & Enforcement ...	.7	.7	1.0	.3	.5	.0	.0	.0	.0	.0	.0
US Fish & Wildlife Service	49.1	56.4	64.8	64.8	64.8	.0	.0	.0	.0	.0	.0
Department of Justice, total	10.7	11.1	14.7	15.0	20.5	20.0	17.7	19.5	20.1	26.3	21.9
Bureau of Prisons	2.1	1.8	1.9	2.5	2.5	2.1	3.2	3.1	1.9	3.2	3.3
Drug Enforcement Admin ² .....	.5	.4	.9	.1	-	.1	.0	-	-	.0	.0
Immigration & Naturalization											
Service ³ .....	.1	.4	.4	.4	.4	.4	.4	.2	.4	.4	.4
Office of Justice Programs	8.0	8.5	11.5	12.0	17.6	17.4	14.1	16.1	17.8	22.7	18.2
Department of Labor, total	21.8	21.3	24.0	23.6	13.4	13.7	16.6	15.2	10.4	9.5	10.1
Bureau of Labor Statistics	7.0	7.3	7.5	7.6	1.5	1.5	1.5	1.8	1.3	1.3	1.3
Employment Standards Admin ...	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin ...	5.7	5.7	6.3	5.4	3.3	2.9	4.2	2.6	1.5	1.6	2.0
Labor-Management Relations &											
Cooperative Programs .....	.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Occupational Safety & Health											
Administration	4.5	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.5	4.6
Office of the Secretary	2.5	3.3	4.7	4.1	2.9	3.1	2.9	1.8	.1	.1	.1
Pension Benefit Guaranty Corp ..	.3	.3	.4	.8	.7	.3	.1	.1	.1	.1	.1
Pension & Welfare Benefits											
Administration	1.4	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.0	2.1
Department of State	1.3	1.2	1.3	.7	.5	.4	.5	.9	1.0	1.0	1.0
Dept of Transportation, total	120.5	119.2	114.6	155.7	224.4	270.4	323.9	336.7	343.7	417.6	439.5
Coast Guard	4.6	5.1	6.4	5.0	8.2	5.6	4.9	5.0	5.7	5.6	4.8
Federal Aviation Admin	23.6	26.1	24.0	30.1	59.8	79.5	83.3	130.6	159.4	150.8	156.3
Federal Highway Admin	56.6	57.6	46.1	72.0	90.1	131.2	156.3	135.4	111.6	185.2	194.6
Federal Railroad Admin	7.5	8.5	13.2	18.9	20.9	16.1	22.5	21.3	18.2	19.3	19.5
Federal Transit Admin .....	.0	.0	.0	.0	10.9	7.8	10.9	5.6	6.0	6.2	8.4
Maritime Administration .....	.0	.9	1.7	1.8	1.7	1.7	2.5	.0	.0	.0	.0
National Highway Traffic											
Safety Administration	26.2	16.9	21.4	25.8	31.6	25.3	39.7	33.2	36.4	42.4	51.4
Office of the Secretary	1.3	1.7	.6	.7	.6	.6	.6	.0	.0	.0	.0
Research & Special Programs											
Administration .....	.7	2.4	1.4	1.4	.5	2.6	3.2	5.6	6.3	8.0	4.5
Dept of the Treasury, total	13.0	15.3	20.6	17.2	4.6	9.2	48.9	50.4	50.8	62.6	63.9
Bureau of Engraving &											
Printing .....	.9	1.4	2.7	1.8	3.2	1.6	1.3	1.5	1.6	1.8	1.8
Internal Revenue Svc	11.3	13.1	13.9	13.9	.0	6.1	45.8	47.5	47.9	58.9	60.0
Off of Thrift Supervision	NA	.0	3.0	.8	.7	.5	.6	.5	.6	.7	.8
US Customs Service ⁴ .....	.4	.4	.5	.2	.1	.5	.7	.5	.4	.6	.6
US Secret Service .....	.4	.5	.4	.5	.6	.5	.5	.5	.4	.6	.8
Department of Veterans Affairs	197.1	199.4	177.7	185.2	194.1	209.1	206.4	222.8	217.4	262.5	259.7

See explanatory information, if any, and SOURCE at end of table.

**Table C-100a. Federal obligations for applied research, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Other agencies:											
Advisory Commission on Intergovernmental Relations	1.1	1.5	1.7	1.7	2.1	1.4	1.4	NA	NA	NA	NA
Appalachian Regional Comm .....	.8	.4	.7	1.9	.9	.9	.9	.9	.9	.9	.9
Consumer Product Safety Comm ...	.5	.4	.9	.8	.8	.1	.0	.0	.1	.2	.2
Environmental Protection Agcy	222.6	241.6	261.9	293.9	272.4	301.0	331.3	329.1	358.0	450.0	453.0
Fed Communications Comm	1.1	1.3	1.4	1.6	1.6	1.7	2.3	2.8	3.1	3.5	3.3
Federal Trade Commission .....	.4	.5	1.0	1.3	.9	.7	.6	.5	.7	1.3	1.1
General Services Admin .....	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
International Development Cooperation Agency, total	216.0	300.2	351.7	294.2	350.8	214.4	270.4	203.0	176.5	141.4	134.7
Agency for International Development ⁵	216.0	300.2	351.7	294.2	350.8	214.4	270.4	203.0	176.5	141.4	134.7
Library of Congress	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.6	.5	.5	.5
Nat'l Aero & Space Admin ⁶	1,461.4	1,423.8	1,665.6	1,491.1	1,748.6	1,876.7	2,067.9	1,897.1	2,090.1	2,483.6	2,217.0
Nat'l Archives & Records Admin .....	.1	.1	.3	.1	.1	.1	.1	.1	.1	.1	.1
National Science Foundation	107.8	103.3	109.0	126.9	138.1	169.7	176.0	181.0	191.8	191.7	212.5
Nuclear Regulatory Commission	114.8	108.8	108.8	119.0	119.8	90.7	88.2	70.9	62.1	50.7	52.8
Office of Thrift Supervision	4.1	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Social Security Admin	NA	NA	NA	NA	NA	NA	NA	11.5	13.6	56.1	37.2
Tennessee Valley Authority ⁷	11.7	17.0	16.9	22.2	18.1	17.0	17.4	3.9	4.0	.6	.0
United States Arms Control & Disarmament Agency	1.2	.2	.4	2.1	1.5	1.3	1.1	.7	1.2	.8	.8
US Information Agency .....	.0	.5	.1	.0	1.1	.6	.3	.1	.2	.2	.0
US Internat'l Trade Comm	8.7	9.1	9.9	12.3	12.2	9.4	12.2	3.2	5.7	5.8	6.1

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the Immigration and Naturalization Service are based on the agency's Volume 46 submission.

⁴ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁵ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁶ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁷ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-101. Federal obligations for development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 3

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all agencies	16,238.4	17,610.1	18,233.1	20,891.1	23,410.4	24,458.0	27,246.1	32,226.1	34,910.2	37,313.2	38,119.3
Departments:											
Dept of Agriculture, total	26.8	31.1	30.2	33.0	30.8	30.0	31.3	32.0	32.1	29.0	31.4
Agricultural Marketing Svc .....	.0	.5	.3	.2	.2	.3	.3	.3	.3	.3	.3
Agricultural Research Svc	NA	NA	NA	26.2	25.8	25.5	27.0	27.7	27.4	24.0	26.3
Forest Service	5.0	5.0	5.5	6.2	4.5	3.8	3.3	3.3	3.6	3.8	4.0
Grain Inspection Packers & Stockyards Administration .....	.0	.0	.0	.0	.0	.0	.0	.2	.3	.5	.4
Office of International Cooperation & Development ...	NA	.0	.4	.3	.2	.4	.7	.4	.3	.3	.2
Office of Transportation	NA	.7	.8	.1	.1	.1	.1	.2	.1	.1	.1
Science & Ed Admin, total	21.8	24.9	23.3	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural Research Svc	21.8	24.9	23.3	NA	NA	NA	NA	NA	NA	NA	NA
Department of Commerce, total	90.9	89.9	88.1	78.6	60.2	50.2	61.5	74.6	59.7	63.7	46.6
Bureau of the Census	1.1	1.2	1.2	.9	1.9	2.1	2.1	2.4	2.1	1.9	1.9
Economic Development Admin ...	32.6	34.6	29.8	26.3	8.0	.0	.0	11.0	8.0	.0	.0
Maritime Administration	12.6	7.4	7.3	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards & Technology	9.8	16.0	17.3	16.3	14.9	13.6	11.8	14.0	11.6	9.3	9.1
National Oceanic & Atmospheric Administration	33.5	28.5	30.9	32.9	33.5	33.1	46.6	45.4	37.2	51.7	34.8
National Telecommunications & Information Administration .....	.7	1.7	1.1	1.1	1.2	1.4	.9	1.2	.8	.8	.8
Office of the Secretary .....	.0	.0	-	.0	.0	-	.1	.6	.0	.0	.0
Patent & Trademark Office .....	.5	.5	.5	1.1	.7	.0	.0	.0	.0	.0	.0
Department of Defense, total	9,729.6	10,492.1	11,719.2	13,907.7	17,669.8	19,770.1	22,324.3	26,623.2	29,710.7	31,884.0	32,009.7
Department of the Army	2,139.1	2,320.1	2,500.7	2,707.7	3,121.3	3,304.5	3,516.8	3,747.4	3,982.1	4,109.6	4,052.3
Department of the Navy	3,472.1	3,767.7	4,095.0	4,308.0	5,066.4	5,241.2	6,840.2	8,336.1	8,865.9	8,721.1	8,766.2
Department of the Air Force	3,813.6	4,033.4	4,673.7	6,351.9	8,724.0	10,124.2	11,351.5	12,524.3	12,834.8	14,562.9	14,094.2
Defense Agencies	276.2	341.7	411.9	499.1	717.1	1,038.7	557.3	1,964.8	3,910.7	4,353.5	4,868.4
Operational Test & Evaluation, Director	NA	NA	NA	NA	NA	NA	NA	NA	.0	8.4	68.2
Test & Evaluation, Deputy Under Secretary of Defense	28.6	29.3	37.9	41.1	41.0	61.6	58.6	50.6	117.1	128.5	160.3
Department of Education	NA	72.9	51.8	.0	57.5	35.6	34.8	33.0	25.5	25.6	29.7
Department of Energy	3,142.6	3,506.9	3,476.4	3,504.6	3,012.1	2,575.6	2,648.7	2,825.0	2,648.0	2,659.4	2,801.0
Dept of Health, Education, & Welfare, total	466.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alcohol, Drug Abuse, & Mental Health Administration	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Resources Admin .....	.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health Services Admin	7.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Inst of Education	54.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health	348.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Education	19.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of Human Dvlpmnt Svcs	30.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table C-101. Federal obligations for development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 2 of 3

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Department of Health & Human Services, total	NA	489.2	447.4	434.9	335.2	331.7	364.7	422.7	468.0	584.3	661.1
Alcohol, Drug Abuse, & Mental Health Administration	NA	.7	.0	1.8	2.1	1.8	1.2	1.1	1.2	2.2	2.4
Hlth Resources & Svcs Admin	NA	NA	NA	NA	3.4	2.3	2.3	1.5	.0	.0	.0
Health Services Admin	NA	18.5	18.7	10.1	NA	NA	NA	NA	NA	NA	NA
Human Development Services	NA	42.2	30.1	33.8	18.5	16.6	13.8	18.5	47.8	43.6	46.8
National Insts of Health	NA	423.0	394.4	384.9	308.7	311.0	347.0	399.6	417.5	536.2	610.2
Office of the Assistant Secretary for Health	NA	4.7	4.2	4.3	2.2	.0	.0	1.7	1.5	2.3	1.6
Office of the Secretary	NA	.0	.0	.0	.3	.0	.4	.2	.0	.0	.0
Dept of Housing & Urban Dvlpmt	39.2	44.1	36.4	31.4	18.5	20.8	11.9	12.0	10.1	10.8	12.1
Dept of the Interior, total	75.5	66.3	56.8	57.3	29.6	24.8	30.7	22.4	17.3	21.7	24.3
Bonneville Power Admin	.0	.0	.0	7.7	NA	NA	NA	NA	NA	NA	NA
Bureau of Land Management	.2	.2	.3	.4	2.9	1.9	2.0	1.6	1.3	1.6	1.5
Bureau of Mines	57.0	41.9	30.6	28.7	13.6	9.2	11.6	3.3	2.8	3.6	5.2
Bureau of Reclamation	.6	.8	1.2	.9	1.1	1.2	1.4	2.0	.5	.5	.7
Geological Survey	.0	.5	.5	.5	.5	2.3	4.9	4.4	7.4	10.3	10.9
Office of the Secretary	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Office of Water Rsch & Tech	12.0	9.4	10.9	5.3	1.3	1.0	.0	NA	NA	NA	NA
US Fish & Wildlife Service	5.7	13.5	13.4	13.7	10.3	9.2	10.8	11.1	5.3	5.7	5.7
Department of Justice, total	15.2	14.1	12.7	7.0	10.4	10.7	6.6	16.7	14.1	22.5	25.7
Bureau of Prisons	2.9	2.9	1.3	.9	.7	.4	.4	.4	.3	4.9	3.9
Drug Enforcement Admin	1.4	1.7	1.9	.9	1.9	1.6	1.2	1.1	1.7	1.5	1.9
Fed Bureau of Investigation	1.8	3.1	1.4	.7	2.7	2.5	1.0	9.5	7.2	8.0	12.7
Immigration & Naturalization Service	.2	.1	.2	.1	.4	.3	.3	.2	.2	.2	.0
Office of Justice Programs	8.3	6.3	7.5	4.4	4.6	5.8	3.8	5.5	4.7	7.9	7.1
Office of Legal Policy	.6	-	.5	.1	-	.1	.0	.0	.0	.0	.0
Department of Labor, total	72.1	94.9	101.6	4.0	8.3	1.9	.0	.9	.9	1.2	8.9
Bureau of Labor Statistics	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Employment & Training Admin	71.7	94.9	101.6	3.6	7.4	1.1	.0	.0	.0	.3	8.0
Office of the Secretary	.0	.0	.0	.0	.0	.0	.0	.9	.9	.9	.9
Pension Benefit Guaranty Corp	NA	NA	NA	.4	.8	.8	.0	.0	.0	.0	.0
Department of State, total	36.1	.5	.3	.2	.0	.0	.0	.0	.0	.0	.0
Agcy for Internat'l Dvlpmt	35.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Departmental Funds	.4	.5	.3	.2	.0	.0	.0	.0	.0	.0	.0
Dept of Transportation, total	341.8	303.1	278.8	327.0	243.4	275.1	370.6	357.6	317.3	256.2	213.4
Coast Guard	21.4	10.2	9.9	11.3	18.3	18.4	12.2	13.6	13.4	13.3	15.7
Federal Aviation Admin	103.7	103.0	94.9	111.8	87.3	113.7	251.2	269.0	246.6	156.2	147.3
Federal Highway Admin	46.8	48.5	46.5	46.1	35.0	43.1	40.3	42.6	30.8	56.0	30.4
Federal Railroad Admin	44.7	36.7	38.3	30.4	15.1	13.7	6.9	3.6	2.9	.8	1.8
Federal Transit Admin	68.5	56.9	45.5	68.9	42.0	38.6	19.1	9.7	8.2	12.6	2.3
Maritime Administration	NA	NA	NA	4.7	4.5	8.8	1.3	5.9	2.6	2.5	.0
National Highway Traffic Safety Administration	28.3	26.6	24.9	36.5	34.1	30.6	32.2	7.2	6.3	9.0	9.2
Office of the Secretary	27.6	11.1	10.2	9.4	3.0	4.6	4.0	3.9	4.7	4.1	5.0
Research & Special Programs Administration	.8	10.0	8.5	7.9	4.0	3.6	3.5	2.2	1.7	1.8	1.7
Dept of the Treasury, total	5.8	4.8	6.3	6.1	5.2	5.4	3.3	6.0	6.3	9.5	10.2
Bureau of Alcohol, Tobacco, & Firearms	1.6	1.9	1.2	.2	NA	NA	NA	NA	NA	NA	NA
Bureau of Engraving & Printing	1.8	1.5	1.0	1.8	2.0	1.9	1.3	1.6	1.1	1.7	.8
Internal Revenue Service	.6	.1	.1	-	.1	.1	.2	1.3	.2	.4	.7
US Customs Service	1.8	1.3	3.7	3.4	3.1	3.3	1.7	2.1	4.6	6.8	8.5
United States Mint	.0	.0	.0	.0	.0	.0	.0	.6	.3	.2	.1
United States Secret Service	NA	NA	.4	.6	.0	-	.1	.5	-	.3	.0
Department of Veterans Affairs	14.6	15.6	15.5	16.7	14.3	15.3	18.4	17.5	16.3	19.2	19.2

See explanatory information, if any, and SOURCE at end of table.

**Table C-101. Federal obligations for development, by agency:
fiscal years 1978-88**

[Dollars in millions]

Page 3 of 3

Selected agency	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Other agencies:											
ACTION	1.4	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Appalachian Regional Comm .....	.1	.2	.2	.1	.1	.0	.1	.0	.0	.0	.0
Community Services Admin	22.3	18.9	29.1	16.4	NA	NA	NA	NA	NA	NA	NA
Consumer Product Safety Comm ...	2.9	2.1	1.9	.3	.1	.2	.2	1.0	.9	1.6	.9
Environmental Protection Agcy	132.0	151.1	99.9	107.4	91.7	66.1	89.2	105.8	99.5	71.0	79.5
Federal Emergency Management											
Agency, total	2.2	2.9	2.5	2.5	.0	.0	5.4	1.2	.0	.0	.0
National Fire Prevention &											
Control Administration	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Foundation for Ed Assistance	NA	NA	NA	51.1	NA	NA	NA	NA	NA	NA	NA
General Services Admin .....	.5	.3	.1	.2	.5	.3	2.0	.0	.3	.0	.0
International Development											
Cooperation Agency, total	NA	39.6	69.7	47.8	72.0	70.6	70.3	60.5	66.2	63.5	69.3
Agcy for Internat'l Dvlpmnt	NA	39.6	69.7	47.8	72.0	70.6	70.3	60.5	66.2	63.5	69.3
Library of Congress	4.4	5.3	6.3	4.0	4.9	6.0	5.4	5.0	5.0	5.0	5.5
Nat'l Aero & Space Admin	1,988.1	2,127.2	1,624.4	2,186.0	1,670.7	1,116.8	1,112.7	1,543.6	1,350.8	1,517.8	1,998.8
National Archives & Records											
Administration	NA	NA	NA	NA	NA	NA	NA	.3	1.0	.4	.2
National Science Foundation	5.3	7.9	8.1	6.1	2.2	.0	.0	.0	.0	.0	.0
Office of Personnel Management ...	3.5	4.6	4.2	5.0	.0	.0	.0	.0	.0	.0	.0
Tennessee Valley Authority	18.0	21.9	64.3	54.7	72.3	50.7	53.8	65.1	59.8	60.2	68.8
United States Arms Control &											
Disarmament Agency	1.2	.8	.8	.8	.6	.1	.2	.0	.1	3.2	2.6
US Information Agency	-	-	-	.3	.1	.0	.0	.0	.4	3.5	.3

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: - = Amount less than 50 thousand dollars

NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-101a. Federal obligations for development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 3

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all agencies	40,641.0	41,937.1	37,326.8	41,102.0	40,423.5	39,824.2	39,752.4	39,395.3	40,464.3	40,643.6	40,340.8
Departments:											
Dept of Agriculture, total	36.1	47.1	61.2	66.1	76.1	77.4	81.4	80.3	98.5	102.6	105.0
Agricultural Marketing Svc .....	.3	.4	.5	.6	.6	.6	.6	.6	.6	.6	.6
Agricultural Research Svc	31.4	33.3	40.2	43.9	52.8	54.3	54.7	54.0	61.9	64.7	67.6
Animal & Plant Health											
Inspection Service .....	.0	8.0	15.7	16.7	17.1	19.2	19.1	18.0	19.8	19.5	19.0
Food Safety Inspection Svc .....	.0	.0	.0	.0	.0	.0	.0	-	-	-	-
Forest Service	3.9	4.8	4.5	4.9	5.5	3.3	5.8	5.6	13.9	15.5	15.5
Grain Inspection Packers & Stockyards Administration .....	.3	.4	.1	.0	.0	.0	1.2	2.0	2.2	2.2	2.3
Office of International Cooperation & Dvlpmnt .....	.1	.2	.2	.0	.0	.0	NA	NA	NA	NA	NA
Department of Commerce, total	46.9	61.2	39.9	55.3	74.2	107.8	243.7	216.9	195.1	153.0	186.0
Bureau of the Census	2.0	2.0	1.9	2.0	2.1	2.0	1.9	3.8	1.7	1.8	3.1
National Institute of Standards & Technology	10.0	10.5	15.6	29.6	34.3	45.9	191.2	161.6	128.9	98.1	135.3
National Oceanic & Atmospheric Administration	34.1	47.7	22.4	23.7	37.8	59.9	50.6	47.7	40.5	30.5	25.6
National Telecommunications & Information Administration .....	.9	.9	.0	.0	.0	.0	.0	3.8	24.0	22.5	22.0
Department of Defense, total	33,920.8	33,738.9	28,416.9	32,056.1	31,065.7	30,312.6	29,597.9	30,539.9	30,978.4	30,952.9	30,261.5
Department of the Army	4,835.9	4,903.8	5,221.0	5,921.5	5,190.5	4,721.5	4,567.2	4,203.2	4,111.1	4,296.8	4,088.6
Department of the Navy	8,882.9	8,778.6	6,932.0	7,138.0	8,106.8	8,081.9	8,083.3	7,712.9	7,329.8	7,234.6	7,403.1
Department of the Air Force	14,430.0	14,055.1	10,107.1	12,636.6	11,747.5	11,713.1	10,963.4	12,159.8	13,135.0	13,112.9	12,843.7
Defense Agencies	5,616.8	5,780.2	5,919.4	6,114.4	5,766.0	5,553.1	5,731.2	6,184.4	6,106.3	6,046.2	5,649.8
Operational Test & Evaluation, Director	14.4	32.6	13.6	12.4	12.3	11.2	21.7	21.9	26.6	27.8	25.3
Test & Evaluation, Deputy Under Secretary of Defense	140.7	188.7	223.7	233.2	242.5	231.8	231.0	257.7	269.7	234.6	251.0
Department of Education	37.2	39.7	39.4	41.5	44.1	39.9	39.3	38.2	43.2	56.6	59.7
Department of Energy	2,760.9	3,060.1	2,709.5	2,759.7	2,821.9	2,765.5	2,685.0	1,982.8	2,035.8	2,084.7	2,412.5
Department of Health & Human Services, total	814.4	938.5	1,593.5	1,042.3	1,156.6	1,285.1	1,379.3	1,407.2	1,559.9	1,665.9	1,839.2
Administration on Aging	NA	NA	17.7	17.8	18.2	15.6	17.7	3.5	4.3	8.0	9.3
Administration for Children & Families	NA	NA	115.5	4.8	1.4	.9	.8	.0	.0	.0	.0
Agency for Health Care Policy & Research	NA	5.5	8.1	8.5	9.2	12.4	11.3	9.2	9.9	9.7	11.8
Alcohol, Drug Abuse, & Mental Health Administration ¹	3.0	41.5	537.6	NA	NA	NA	NA	NA	NA	NA	NA
Hlth Resources & Svcs Admin ....	.0	.0	.0	.0	.0	5.8	1.0	.0	.0	.0	.0
Human Development Svcs	93.2	87.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Insts of Health ¹	716.5	800.7	912.5	1,010.5	1,126.6	1,249.6	1,348.2	1,374.1	1,473.3	1,569.5	1,739.2
Office of the Assistant Secretary for Health	1.7	1.1	.4	.7	1.2	.8	.3	NA	NA	NA	NA
Off of the Secretary, total .....	.0	.0	.0	.0	.0	.0	.0	3.7	3.3	2.8	2.9
Office of Public Health & Science	NA	NA	NA	NA	NA	NA	NA	3.7	3.3	2.8	2.9
Social Security Admin .....	.0	2.1	1.7	.0	.0	.0	.0	NA	NA	NA	NA
Substance Abuse & Mental Health Services Admin	NA	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0

See explanatory information, if any, and SOURCE at end of table.

**Table C-101a. Federal obligations for development, by agency:
fiscal years 1989-99**

[Dollars in millions]

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Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Dept of Housing & Urban Dvlpmt ...	11.9	12.7	18.4	16.3	15.5	25.9	27.7	22.0	22.2	25.5	32.3
Dept of the Interior, total	27.1	33.3	39.5	38.6	39.0	43.9	29.2	25.5	27.2	30.0	29.5
Bureau of Land Management	1.0	.7	2.8	.4	.9	.0	.0	.0	.0	.0	.0
Bureau of Mines	5.4	9.4	7.1	4.2	6.9	12.5	.0	NA	NA	NA	NA
Bureau of Reclamation .....	.6	.5	.9	2.5	2.8	1.8	2.0	1.6	1.7	2.2	2.6
Geological Survey	12.9	15.1	18.2	16.9	12.8	15.7	14.1	23.8	25.5	27.8	26.9
Nat'l Biological Svc	NA	NA	NA	NA	.0	13.8	13.0	NA	NA	NA	NA
Office of the Secretary .....	.4	.2	.5	.7	.2	.1	-	.0	.0	.0	.0
US Fish & Wildlife Service	6.7	7.4	10.0	13.9	15.3	.0	.0	.0	.0	.0	.0
Department of Justice, total	20.6	20.6	27.8	27.7	23.3	19.2	32.1	45.2	52.3	58.0	50.1
Bureau of Prisons	3.0	2.7	3.3	3.4	3.6	3.3	2.5	2.2	2.7	2.8	2.9
Drug Enforcement Admin ²	2.2	2.0	1.8	1.3	.8	.8	.4	1.2	-	-	-
Fed Bureau of Investigation	7.7	8.2	10.8	10.9	11.3	7.0	10.9	33.5	35.5	35.7	35.8
Office of Justice Programs	7.8	7.7	11.9	12.1	7.5	8.1	18.3	8.5	14.0	19.5	11.4
Department of Labor, total	13.3	51.4	19.7	27.9	36.1	40.1	25.5	25.8	13.3	26.2	48.2
Employment & Training Admin ...	9.7	47.4	15.5	26.1	32.5	36.9	21.4	24.3	12.6	25.5	47.4
Office of the Secretary	3.6	3.8	4.0	1.7	3.0	2.2	3.4	.8	.1	.1	.1
Pension Benefit Guaranty Corp ..	.0	.2	.2	.1	.6	1.0	.7	.6	.6	.6	.6
Dept of Transportation, total	182.9	247.4	265.3	288.1	319.3	347.4	356.2	177.3	145.7	188.0	272.6
Coast Guard	13.3	15.2	19.2	15.0	24.7	16.7	14.8	15.0	17.2	16.9	14.4
Federal Aviation Admin	123.2	189.9	196.2	206.1	189.1	206.1	205.1	77.7	49.7	56.4	133.7
Federal Highway Admin	34.4	33.8	40.8	57.0	83.1	101.5	109.4	66.1	61.1	96.6	109.8
Federal Railroad Admin	1.5	1.7	2.7	3.9	4.3	3.4	4.0	5.4	.7	.7	.7
Federal Transit Admin	1.4	1.6	1.7	1.7	13.3	12.1	17.9	8.1	11.1	10.3	7.8
National Highway Traffic Safety Administration	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Office of the Secretary	4.2	5.1	3.7	3.4	3.9	4.9	3.3	2.8	3.5	4.1	3.5
Research & Special Programs Administration	1.3	.0	1.0	1.1	.8	2.7	1.8	2.1	2.4	3.1	2.7
Dept of the Treasury, total	9.3	6.9	6.7	3.8	5.5	9.8	12.4	9.5	8.8	11.6	11.4
Bureau of Engraving & Printing .....	.3	.7	.8	.2	.0	.1	.5	.1	.1	.1	.1
Financial Crimes Enforcement Network .....	.0	.0	2.3	1.2	1.5	.0	.0	.0	.0	.0	.0
Internal Revenue Svc .....	.3	.3	.4	.4	.0	5.2	3.9	3.7	3.0	2.8	2.9
US Customs Service ³	6.4	5.8	3.2	2.0	3.9	4.0	7.7	5.7	5.8	8.2	8.2
United States Mint	2.0	.1	.1	.0	.1	.5	.3	.0	-	.5	.2
US Secret Service .....	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	21.0	22.1	22.8	23.0	28.7	24.5	19.1	20.8	21.7	22.7	24.8

See explanatory information, if any, and SOURCE at end of table.

**Table C-101a. Federal obligations for development, by agency:
fiscal years 1989-99**

[Dollars in millions]

Page 3 of 3

Selected agency	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Other agencies:											
Consumer Product Safety Comm ...	.8	.7	.4	.3	.4	.2	.4	-	.0	.0	.0
Environmental Protection Agcy	107.0	104.5	79.5	79.6	133.7	151.2	149.9	83.5	83.1	99.0	100.0
International Development Cooperation Agency, total	60.0	29.3	20.4	65.9	23.0	38.1	29.8	18.0	29.7	41.2	48.5
Agency for International Development ⁴	60.0	29.3	20.4	65.9	23.0	38.1	29.8	18.0	29.7	41.2	48.5
Library of Congress	6.4	7.0	7.3	8.5	8.7	8.1	8.0	8.4	2.0	1.9	2.0
Nat'l Aero & Space Admin ⁵	2,514.7	3,472.6	3,909.1	4,428.3	4,471.1	4,455.7	4,968.9	4,692.1	5,142.4	5,121.5	4,857.6
Nat'l Archives & Records Admin .....	.1	.1	.1	.1	-	.0	.0	.0	.0	.0	.0
Tennessee Valley Authority ⁶	48.0	43.2	49.5	72.9	80.6	71.9	66.7	1.9	4.9	2.2	.0
United States Arms Control & Disarmament Agency	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
US Information Agency .....	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

¹ Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields in fiscal year 1992 seems to be underreported. Historical revisions to these data are expected to be reported in future series.

² Large differences exist between the Drug Enforcement Administration's fiscal years 1996 and 1997 R&D funding amounts due to changes in this agency's R&D programs.

³ Fiscal years 1997-99 figures for the United States Customs Service are estimates based on the agency's Volume 46 submission.

⁴ Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1997-99) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

⁵ During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

⁶ In 1998, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 research and development (R&D) values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY: - = Amount less than 50 thousand dollars
NA= Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-102. Federal obligations for research and development, by performer:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

Performer	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	25,845.1	28,145.1	29,830.4	33,103.9	36,432.6	38,711.5	42,224.9	48,359.6	51,412.4	55,253.7	56,769.4
Intramural ¹	6,810.4	7,417.5	7,632.3	8,425.7	9,141.0	10,581.9	11,572.3	12,945.4	13,534.9	13,413.1	14,114.6
Industrial firms excluding FFRDCs	11,400.0	12,172.4	12,969.1	14,867.9	17,192.2	17,019.7	18,610.4	21,704.9	24,201.2	26,768.2	26,719.2
FFRDCs administered by industrial firms	1,242.5	1,318.1	1,408.1	1,413.9	1,506.4	1,501.2	1,608.4	1,790.8	1,697.0	1,860.0	1,911.3
Universities & colleges excluding FFRDCs	3,374.6	3,888.8	4,263.4	4,465.8	4,605.5	4,966.4	5,546.9	6,339.7	6,558.8	7,337.3	7,827.7
FFRDCs administered by universities ²	1,311.9	1,488.3	1,533.3	1,791.0	1,976.7	2,393.9	2,485.8	2,816.4	2,767.7	3,209.6	3,473.9
Nonprofit institutions excluding FFRDCs	998.2	1,026.5	1,105.6	1,068.8	1,091.7	1,241.6	1,497.3	1,699.2	1,677.0	1,711.4	1,683.2
FFRDCs administered by nonprofit institutions ²	315.9	368.7	441.8	525.2	520.6	581.3	597.1	689.2	551.2	510.6	505.6
State and local governments	268.4	310.1	265.5	222.2	184.3	186.0	130.9	129.4	128.4	148.2	142.1
Foreign	123.2	154.7	211.2	323.4	214.3	239.5	175.8	244.5	296.3	295.3	391.8

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-102a. Federal obligations for research and development, by performer:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 1

Performer	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total	61,406.5	63,559.5	61,295.2	65,592.6	67,314.0	67,235.4	68,186.8	67,655.0	69,829.9	72,114.1	73,333.2
Intramural ¹	15,024.6	15,848.9	15,138.2	15,582.8	16,663.3	16,132.1	17,024.8	16,540.4	16,720.0	17,097.6	17,463.3
Industrial firms excluding FFRDCs	28,547.9	29,370.0	26,420.6	29,744.8	30,219.0	30,454.9	30,236.1	30,373.8	31,418.0	32,313.4	31,830.5
FFRDCs administered by industrial firms	2,056.3	2,326.8	2,168.3	2,117.0	1,451.3	1,293.5	1,201.8	1,137.0	1,128.2	1,226.6	1,326.3
Universities & colleges excluding FFRDCs	8,672.0	9,137.5	10,168.5	10,271.2	11,208.4	11,796.9	11,927.5	11,980.2	12,561.1	13,273.2	14,170.5
FFRDCs administered by universities	3,497.1	3,449.8	3,603.8	3,855.5	3,614.2	3,292.9	3,561.6	3,447.1	3,701.0	3,570.6	3,894.4
Nonprofit institutions excluding FFRDCs	1,999.9	2,248.2	2,637.4	2,803.6	2,811.9	2,936.9	2,834.1	2,886.3	2,962.1	3,256.9	3,245.0
FFRDCs administered by nonprofit institutions	522.0	621.6	679.4	745.6	753.4	736.0	825.1	755.2	821.0	817.2	841.5
State and local governments	167.4	213.9	215.1	184.1	320.3	325.4	316.5	246.7	261.1	310.3	328.1
Foreign	919.4	342.6	263.9	287.9	272.2	266.8	259.2	288.3	257.5	248.1	233.6

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-103. Federal obligations for research, by performer:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

Performer	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	9,606.8	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1
Intramural ¹	3,220.8	3,481.2	3,666.3	4,034.2	4,194.2	4,710.3	4,764.7	5,056.1	5,160.3	5,437.7	5,338.4
Industrial firms excluding FFRDCs	1,651.4	1,762.0	2,077.6	1,958.3	2,156.6	2,114.2	2,137.4	2,074.4	2,280.5	2,448.6	2,642.5
FFRDCs administered by industrial firms	235.2	245.0	311.0	351.3	487.3	522.6	496.5	485.9	482.1	433.5	455.2
Universities & colleges excluding FFRDCs	2,928.0	3,333.4	3,699.1	3,920.1	4,045.4	4,467.9	5,029.7	5,726.3	5,883.4	6,640.2	7,022.9
FFRDCs administered by universities ²	714.9	800.6	851.2	940.6	1,056.7	1,250.1	1,335.9	1,421.3	1,291.7	1,471.0	1,564.8
Nonprofit institutions excluding FFRDCs	590.9	622.6	678.4	705.2	743.5	836.9	922.6	1,045.1	1,062.9	1,207.5	1,300.0
FFRDCs administered by nonprofit institutions ²	66.9	73.4	71.7	67.7	104.2	85.2	87.3	97.0	87.9	89.8	82.9
State and local governments	128.8	139.5	150.9	129.3	125.9	136.7	88.2	89.5	91.0	90.2	103.1
Foreign	69.9	77.4	91.1	106.0	108.3	129.6	116.5	137.9	162.4	121.9	140.4

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-103a. Federal obligations for research, by performer:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 1

Performer	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total	20,765.5	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.6	31,470.5	32,992.4
Intramural ¹	5,897.0	5,809.8	6,454.4	6,523.3	7,451.8	7,481.1	7,684.5	7,513.2	7,667.2	8,250.6	8,610.9
Industrial firms excluding FFRDCs	2,875.0	3,191.6	3,406.5	3,451.2	3,923.8	4,063.9	4,698.7	4,269.1	4,392.1	5,004.4	4,785.8
FFRDCs administered by industrial firms	604.3	614.3	709.6	684.9	799.3	737.2	811.6	696.2	759.6	803.7	849.6
Universities & colleges excluding FFRDCs	7,793.1	8,136.5	8,867.5	9,060.7	9,892.3	10,291.7	10,353.8	10,706.6	11,173.2	11,815.1	12,721.2
FFRDCs administered by universities	1,703.4	1,791.5	2,160.9	2,351.8	2,299.4	2,181.1	2,233.6	2,385.0	2,598.9	2,665.3	2,955.0
Nonprofit institutions excluding FFRDCs	1,519.8	1,660.0	1,925.9	2,049.6	2,041.3	2,102.1	2,078.7	2,178.9	2,294.9	2,426.2	2,559.9
FFRDCs administered by nonprofit institutions	109.5	137.6	170.9	139.9	173.4	178.4	207.2	195.5	217.5	217.4	207.5
State and local governments	121.2	126.4	129.3	109.3	211.8	230.8	221.4	187.4	144.0	168.8	184.3
Foreign	142.1	154.5	143.4	120.0	97.4	144.8	144.8	127.8	118.1	119.0	118.3

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-104. Federal obligations for basic research, by performer:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

Performer	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	3,698.6	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6
Intramural ¹	1,029.3	1,089.1	1,182.5	1,301.8	1,465.5	1,689.8	1,861.1	1,923.4	2,018.9	2,046.2	2,050.3
Industrial firms excluding FFRDCs	247.7	277.1	325.3	292.9	270.9	292.9	377.9	380.1	511.6	467.0	596.9
FFRDCs administered by industrial firms	65.4	66.6	70.4	73.3	87.4	83.0	91.1	122.6	117.6	119.9	133.0
Universities & colleges excluding FFRDCs	1,759.2	2,079.9	2,320.3	2,503.2	2,727.1	3,112.3	3,530.8	4,038.7	4,132.1	4,665.6	4,868.3
FFRDCs administered by universities ²	356.8	393.6	436.8	490.6	516.7	604.0	668.9	724.2	724.1	906.7	989.8
Nonprofit institutions excluding FFRDCs	192.8	240.3	279.5	313.1	355.6	409.6	473.6	555.8	572.1	657.7	728.6
FFRDCs administered by nonprofit institutions ²	5.8	6.7	7.5	8.6	9.0	8.0	8.2	12.4	13.0	13.3	17.7
State and local governments	17.1	19.8	23.9	26.5	24.5	32.1	28.1	30.5	30.9	37.5	42.7
Foreign	24.6	19.5	28.1	31.2	24.9	28.5	27.7	30.9	32.7	28.5	46.3

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-104a. Federal obligations for basic research, by performer:
fiscal years 1989-99**

[Dollars in millions]

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Performer	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total	10,602.0	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,942.2	15,861.5	16,913.8
Intramural ¹	2,313.4	2,294.6	2,391.6	2,337.6	2,661.8	2,497.8	2,693.5	2,676.7	2,688.6	2,872.2	3,063.7
Industrial firms excluding FFRDCs	773.2	887.5	949.9	920.3	896.3	1,109.6	1,214.2	1,108.8	1,166.7	1,373.9	1,279.1
FFRDCs administered by industrial firms	223.9	246.8	264.0	247.2	243.6	237.6	239.8	272.8	294.7	324.0	335.6
Universities & colleges excluding FFRDCs	5,221.4	5,548.2	6,064.5	6,331.8	6,833.7	6,992.3	6,943.9	7,443.5	7,695.8	8,067.0	8,763.0
FFRDCs administered by universities	1,098.1	1,227.3	1,306.2	1,394.1	1,402.7	1,336.0	1,438.8	1,521.0	1,600.0	1,584.5	1,754.9
Nonprofit institutions excluding FFRDCs	838.9	924.1	1,015.5	1,097.2	1,164.9	1,132.9	1,148.3	1,234.6	1,289.6	1,400.6	1,476.2
FFRDCs administered by nonprofit institutions	42.2	59.2	80.8	65.5	71.3	74.4	75.2	76.1	88.4	113.2	105.3
State and local governments	43.6	50.4	49.1	42.4	71.7	75.2	78.7	80.2	68.4	72.7	80.6
Foreign	47.4	47.6	49.1	53.8	53.3	67.6	44.6	50.5	49.9	53.4	55.5

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-105. Federal obligations for applied research, by performer:
fiscal years 1978-88**

[Dollars in millions]

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Performer	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	5,908.2	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5
Intramural ¹	2,191.5	2,392.1	2,483.8	2,732.4	2,728.7	3,020.4	2,903.6	3,132.7	3,141.5	3,391.5	3,288.1
Industrial firms excluding FFRDCs	1,403.7	1,484.9	1,752.3	1,665.4	1,885.7	1,821.3	1,759.5	1,694.3	1,768.8	1,981.6	2,045.6
FFRDCs administered by industrial firms	169.8	178.3	240.7	278.1	400.0	439.7	405.4	363.3	364.5	313.6	322.2
Universities & colleges excluding FFRDCs	1,168.8	1,253.5	1,378.8	1,416.9	1,318.3	1,355.6	1,498.9	1,687.6	1,751.4	1,974.6	2,154.6
FFRDCs administered by universities ²	358.1	407.0	414.3	450.0	540.0	646.1	667.0	697.1	567.6	564.3	575.0
Nonprofit institutions excluding FFRDCs	398.1	382.3	398.9	392.1	387.9	427.3	449.0	489.3	490.8	549.8	571.3
FFRDCs administered by nonprofit institutions ²	61.2	66.7	64.2	59.1	95.2	77.1	79.1	84.6	74.9	76.5	65.2
State and local governments	111.8	119.7	127.1	102.8	101.4	104.7	60.0	58.9	60.0	52.7	60.4
Foreign	45.3	57.9	63.0	74.8	83.4	101.1	88.8	107.0	129.7	93.4	94.1

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-105a. Federal obligations for applied research, by performer:
fiscal years 1989-99**

[Dollars in millions]

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Performer	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total	10,163.5	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,609.0	16,078.6
Intramural ¹	3,583.5	3,515.2	4,062.8	4,185.7	4,790.0	4,983.3	4,991.0	4,836.5	4,978.7	5,378.4	5,547.2
Industrial firms excluding FFRDCs	2,101.8	2,304.2	2,456.6	2,530.9	3,027.5	2,954.4	3,484.5	3,160.3	3,225.5	3,630.5	3,506.7
FFRDCs administered by industrial firms	380.5	367.5	445.6	437.6	555.6	499.6	571.8	423.4	464.9	479.8	514.0
Universities & colleges excluding FFRDCs	2,571.8	2,588.4	2,803.0	2,728.9	3,058.6	3,299.4	3,409.9	3,263.1	3,477.4	3,748.1	3,958.1
FFRDCs administered by universities	605.4	564.3	854.7	957.6	896.8	845.1	794.8	864.0	998.8	1,080.8	1,200.1
Nonprofit institutions excluding FFRDCs	681.0	735.9	910.4	952.5	876.4	969.2	930.4	944.3	1,005.3	1,025.6	1,083.7
FFRDCs administered by nonprofit institutions	67.3	78.4	90.1	74.5	102.2	104.0	132.0	119.4	129.2	104.2	102.2
State and local governments	77.6	76.1	80.2	66.9	140.1	155.5	142.7	107.3	75.5	96.1	103.8
Foreign	94.6	106.9	94.3	66.2	44.1	77.2	100.3	77.4	68.2	65.5	62.8

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-106. Federal obligations for development, by performer:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

Performer	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	16,238.4	17,610.1	18,233.1	20,891.1	23,410.4	24,458.0	27,246.1	32,226.1	34,910.2	37,313.2	38,119.3
Intramural ¹	3,589.7	3,936.3	3,966.1	4,391.5	4,946.8	5,871.7	6,807.6	7,889.3	8,374.6	7,975.3	8,776.2
Industrial firms excluding FFRDCs	9,748.6	10,410.5	10,891.5	12,909.6	15,035.6	14,905.5	16,472.9	19,630.5	21,920.7	24,319.6	24,076.7
FFRDCs administered by industrial firms	1,007.3	1,073.1	1,097.0	1,062.6	1,019.1	978.5	1,112.0	1,304.9	1,215.0	1,426.4	1,456.1
Universities & colleges excluding FFRDCs	446.6	555.5	564.4	545.6	560.0	498.5	517.2	613.5	675.4	697.0	804.8
FFRDCs administered by universities ²	597.1	687.7	682.2	850.4	920.0	1,143.8	1,149.9	1,395.1	1,476.0	1,738.6	1,909.1
Nonprofit institutions excluding FFRDCs	407.3	403.8	427.1	363.6	348.1	404.7	574.6	654.1	614.1	503.9	383.2
FFRDCs administered by nonprofit institutions ²	249.0	295.4	370.1	457.5	416.4	496.1	509.8	592.2	463.3	420.8	422.7
State and local governments	139.6	170.7	114.6	92.9	58.4	49.3	42.8	39.9	37.4	58.0	39.0
Foreign	53.2	77.3	120.1	217.5	106.0	109.9	59.2	106.7	133.9	173.4	251.4

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

² In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-106a. Federal obligations for development, by performer:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 1

Performer	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total	40,641.0	41,937.1	37,326.8	41,102.0	40,423.5	39,824.2	39,752.4	39,395.3	40,464.3	40,643.6	40,340.8
Intramural ¹	9,127.6	10,039.1	8,683.8	9,059.6	9,211.6	8,650.9	9,340.2	9,027.2	9,052.7	8,847.1	8,852.3
Industrial firms excluding FFRDCs	25,672.9	26,178.4	23,014.1	26,293.6	26,295.2	26,390.9	25,537.4	26,104.7	27,025.8	27,309.0	27,044.7
FFRDCs administered by industrial firms	1,452.0	1,712.5	1,458.7	1,432.2	652.1	556.3	390.2	440.7	368.6	422.9	476.7
Universities & colleges excluding FFRDCs	878.8	1,001.0	1,301.0	1,210.6	1,316.1	1,505.2	1,573.7	1,273.7	1,387.9	1,458.1	1,449.4
FFRDCs administered by universities	1,793.6	1,658.3	1,442.9	1,503.7	1,314.8	1,111.8	1,328.0	1,062.1	1,102.1	905.3	939.4
Nonprofit institutions excluding FFRDCs	480.0	588.2	711.5	753.9	770.6	834.8	755.4	707.4	667.2	830.7	685.1
FFRDCs administered by nonprofit institutions	412.4	484.0	508.5	605.7	580.0	557.6	617.9	559.7	603.4	599.8	634.1
State and local governments	46.3	87.5	85.8	74.8	108.5	94.7	95.1	59.3	117.1	141.5	143.8
Foreign	777.3	188.1	120.5	167.9	174.8	122.0	114.4	160.5	139.3	129.2	115.3

¹ Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-107. Federal obligations for total research, by detailed field of science and engineering:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

Field of science and engineering	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	9,606.8	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1
Life sciences, total	3,427.1	3,848.3	4,192.3	4,435.6	4,745.5	5,177.9	5,635.9	6,362.5	6,464.3	7,341.4	7,724.5
Biol & agricultural, total	2,024.0	2,320.3	2,507.6	2,711.8	2,811.8	3,064.4	3,325.0	3,755.3	3,861.3	4,358.5	4,573.4
Biol (excl environmental)	1,488.5	1,702.2	1,830.6	1,996.6	2,079.3	2,305.5	2,563.1	2,885.7	2,993.4	3,502.0	3,681.7
Environmental biology	184.9	216.6	229.7	220.3	183.5	193.6	250.0	260.3	264.1	289.6	301.0
Agricultural	350.7	401.5	447.2	494.8	549.0	565.2	512.0	609.3	603.8	566.9	590.7
Medical sciences, total	1,287.4	1,380.6	1,536.9	1,609.9	1,773.0	1,927.5	2,112.8	2,368.5	2,360.4	2,664.8	2,941.0
Life sciences, n.e.c.	115.7	147.3	147.9	113.9	160.7	186.1	198.1	238.7	242.6	318.2	210.1
Psychology, total	176.7	197.4	199.0	208.9	218.4	240.9	266.7	327.1	334.0	369.5	389.8
Biological aspects	53.4	56.8	59.9	57.5	59.6	63.2	80.8	91.2	90.1	98.3	105.3
Social aspects	65.4	83.6	94.8	93.5	98.1	104.7	107.8	142.9	143.5	154.5	149.4
Psychological sci, n.e.c.	57.9	57.0	44.3	57.9	60.7	73.0	78.1	93.1	100.4	116.7	135.2
Physical sciences, total	1,645.6	1,792.6	2,000.6	2,220.5	2,500.4	2,891.4	2,969.0	3,046.0	3,069.1	3,252.6	3,317.3
Astronomy	213.6	284.4	285.7	281.0	275.8	357.4	382.3	414.7	468.2	522.2	470.8
Chemistry	405.0	443.6	454.5	486.9	481.2	520.3	606.4	650.4	662.4	680.3	703.1
Physics	942.4	1,022.7	1,182.5	1,345.6	1,610.5	1,854.6	1,836.4	1,816.0	1,805.9	1,853.6	1,975.3
Physical sciences, n.e.c.	84.6	41.8	77.9	107.0	132.9	159.2	143.9	164.8	132.6	196.6	168.1
Environmental sciences, total	1,024.6	1,101.0	1,261.0	1,121.1	1,148.3	1,251.2	1,275.9	1,403.7	1,481.7	1,511.6	1,607.0
Atmospheric sciences	319.2	348.7	409.5	373.4	425.8	460.7	434.1	486.0	521.3	552.9	587.8
Geological sciences	316.4	358.7	401.8	396.1	357.6	333.5	359.0	429.0	443.9	441.7	441.6
Oceanography	223.8	220.5	262.1	261.7	261.3	343.5	363.5	398.5	429.7	427.4	460.4
Environmental sci, n.e.c.	165.2	173.1	187.6	89.9	103.6	113.5	119.3	90.2	86.8	89.5	117.1
Math & computer sci, total	216.3	210.3	240.9	278.9	350.1	419.4	440.3	574.9	615.4	640.6	642.9
Mathematics	93.4	84.2	90.9	117.7	128.1	133.5	151.0	183.6	184.5	204.5	217.9
Computer sciences	107.3	106.3	128.6	121.5	170.9	214.6	214.5	280.3	302.4	297.8	292.7
Math & computer sci, n.e.c.	15.7	19.9	21.4	39.7	51.0	71.4	74.8	111.0	128.5	138.3	132.3
Engineering, total	2,421.2	2,571.6	2,830.1	3,071.5	3,386.5	3,517.0	3,624.1	3,617.6	3,738.9	3,906.3	3,956.4
Aeronautical	482.9	624.9	708.1	709.6	741.2	820.6	860.4	738.0	775.6	810.4	801.8
Astronautical	165.1	251.1	302.3	303.9	290.7	321.5	396.8	424.7	526.9	624.6	575.4
Chemical	149.4	114.3	96.3	147.6	95.1	145.0	144.5	254.3	245.8	215.8	258.1
Civil	142.4	125.0	158.8	159.1	201.9	188.5	202.8	216.6	202.9	204.4	214.9
Electrical	432.6	417.9	517.1	556.7	612.2	614.9	630.0	626.8	674.4	786.3	731.1
Mechanical	234.1	195.9	208.0	204.6	201.2	266.4	190.5	267.0	236.5	233.5	240.8
Metallurgy & materials	286.0	249.3	236.2	256.0	309.1	332.5	341.1	439.2	445.0	362.0	456.7
Engineering, n.e.c.	528.6	593.2	603.3	733.9	935.1	827.6	858.0	651.0	631.7	669.3	677.8
Social sciences, total	489.5	527.3	523.8	497.4	385.9	435.3	436.3	460.0	415.5	480.0	485.8
Anthropology	19.5	17.3	17.2	14.5	14.6	12.8	18.6	18.0	13.6	15.2	14.3
Economics	163.2	181.9	192.8	206.7	157.1	165.6	147.3	159.7	131.3	148.5	159.5
Political science	8.8	13.9	12.2	10.8	7.5	11.1	10.8	14.6	11.6	11.3	12.2
Sociology	60.3	64.5	71.4	65.0	52.0	67.8	70.2	66.5	67.0	74.0	81.8
Social sciences, n.e.c.	237.6	249.6	230.3	200.4	154.7	178.0	189.5	201.3	192.0	231.0	218.0
Other sciences, n.e.c.	205.8	286.6	349.6	378.8	287.0	320.4	330.5	341.6	383.3	438.3	526.5

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-107a. Federal obligations for total research, by detailed field of science and engineering:
fiscal years 1989-99**

[Dollars in millions]

Page 1 of 1

Field of science and engineering	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all fields	20,765.5	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.6	31,470.5	32,992.4
Life sciences, total	8,495.1	8,829.8	9,622.0	9,910.5	10,772.1	11,284.3	11,811.0	12,064.3	12,661.3	13,620.8	14,386.4
Biol & agricultural, total	5,020.0	5,178.4	5,597.9	5,633.6	6,059.3	6,103.0	6,402.5	6,629.9	6,544.0	NA	NA
Biol (excl environmental)	3,983.2	4,144.6	4,457.8	4,435.1	4,789.9	4,745.8	4,925.4	5,309.9	5,320.2	NA	NA
Environmental biology	367.8	342.3	459.7	511.0	556.5	629.9	806.9	704.0	582.5	NA	NA
Agricultural	669.0	691.4	680.3	687.5	712.9	727.2	670.3	616.0	641.3	NA	NA
Medical sciences	3,222.5	3,382.4	3,460.3	3,909.9	4,404.4	4,862.1	4,972.2	4,973.4	5,532.7	NA	NA
Life sciences, n.e.c.	252.6	269.1	563.8	367.0	308.3	319.3	436.3	461.1	584.6	NA	NA
Psychology, total	421.7	448.6	482.4	298.1	550.7	548.4	622.6	525.0	545.4	578.0	612.4
Biological aspects	121.8	130.6	140.2	34.6	37.2	48.1	58.8	62.8	57.8	NA	NA
Social aspects	149.9	177.5	197.5	100.9	134.7	116.8	156.3	83.4	96.7	NA	NA
Psychological sci, n.e.c.	149.9	140.5	144.8	162.6	378.7	383.4	407.5	378.8	390.9	NA	NA
Physical sciences, total	3,705.2	3,808.7	4,235.3	4,439.2	4,427.0	4,253.5	4,278.3	3,923.0	4,148.7	4,335.0	4,577.9
Astronomy	541.9	597.2	631.7	739.1	686.3	747.6	764.5	729.0	774.7	NA	NA
Chemistry	782.6	761.7	828.4	896.2	843.2	874.4	863.5	881.1	845.5	NA	NA
Physics	2,190.8	2,254.9	2,460.9	2,578.2	2,638.4	2,443.1	2,451.2	1,991.3	2,067.6	NA	NA
Physical sciences, n.e.c.	189.9	195.0	314.3	225.7	259.2	188.3	199.2	321.6	460.9	NA	NA
Environmental sciences, total	1,773.2	2,174.1	2,149.8	2,207.6	2,608.5	2,838.2	2,854.4	3,019.7	3,045.7	3,287.6	3,261.0
Atmospheric sciences	588.0	773.4	802.7	767.3	984.1	1,095.0	1,135.6	1,085.7	1,164.3	NA	NA
Geological sciences	542.8	661.1	728.7	735.7	797.9	838.0	848.3	784.3	691.8	NA	NA
Oceanography	491.9	520.1	398.6	458.9	467.4	496.8	407.3	574.3	597.7	NA	NA
Environmental sci, n.e.c.	150.5	219.5	219.8	245.8	359.2	408.5	463.3	575.4	591.8	NA	NA
Math & computer sci, total	735.4	840.7	903.7	1,160.3	1,225.4	1,301.6	1,579.1	1,571.6	1,671.8	1,830.9	2,254.9
Mathematics	236.1	241.3	227.6	318.7	290.8	342.3	258.6	254.5	301.6	NA	NA
Computer sciences	364.6	562.1	584.9	771.8	826.1	830.2	1,013.9	1,119.8	1,264.7	NA	NA
Math & computer sci, n.e.c.	134.8	37.3	91.1	69.9	108.5	129.1	306.6	197.3	105.5	NA	NA
Engineering, total	4,442.2	4,226.6	4,944.5	4,977.0	5,499.4	5,479.4	5,708.4	5,680.9	5,690.3	6,090.0	6,023.0
Aeronautical	986.8	927.1	1,016.2	874.6	1,193.0	1,222.7	1,248.3	1,249.4	1,352.7	NA	NA
Astronautical	677.4	580.8	653.1	630.4	494.0	499.1	546.5	526.6	596.3	NA	NA
Chemical	142.2	241.9	304.3	297.5	245.5	238.2	246.1	215.1	235.0	NA	NA
Civil	229.8	317.7	305.0	330.2	252.0	277.9	339.4	300.2	275.6	NA	NA
Electrical	843.1	640.0	729.9	759.0	881.5	741.8	756.3	669.7	622.2	NA	NA
Mechanical	257.4	268.3	335.5	337.2	466.9	378.1	412.5	294.0	254.6	NA	NA
Metallurgy & materials	521.0	554.5	710.7	727.2	695.7	851.4	815.3	989.0	860.7	NA	NA
Engineering, n.e.c.	784.5	696.3	889.8	1,020.8	1,270.9	1,270.2	1,344.0	1,437.0	1,493.2	NA	NA
Social sciences, total	551.0	630.0	727.3	689.7	674.9	647.4	678.7	654.6	696.3	823.7	883.0
Anthropology	13.9	14.4	16.0	14.1	13.7	16.2	21.7	18.3	21.0	NA	NA
Economics	166.8	197.2	187.4	211.6	204.7	193.3	206.5	194.2	204.3	NA	NA
Political science	13.5	13.1	17.0	22.6	29.2	25.4	22.3	16.7	14.5	NA	NA
Sociology	94.1	116.2	184.0	80.7	76.7	68.1	47.8	41.2	25.7	NA	NA
Social sciences, n.e.c.	262.8	289.1	322.9	360.8	350.5	344.4	380.3	384.2	430.8	NA	NA
Other sciences, n.e.c.	641.6	663.7	903.4	808.3	1,132.5	1,058.4	901.8	820.7	906.1	904.4	993.8

NOTES: Because of rounding, detail may not add to totals.

During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-108. Federal obligations for basic research, by detailed field of science and engineering:
fiscal years 1978-88**

[Dollars in millions]

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Field of science and engineering	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	3,698.6	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6
Life sciences, total	1,588.4	1,891.8	2,054.4	2,223.8	2,526.0	2,891.3	3,287.6	3,786.6	3,858.8	4,361.9	4,501.8
Biol & agricultural, total	1,078.7	1,279.3	1,339.4	1,462.4	1,674.8	1,928.8	2,174.7	2,515.5	2,543.0	2,870.4	2,855.3
Biol (excl environmental)	874.5	1,055.5	1,099.9	1,201.7	1,401.2	1,621.9	1,835.8	2,106.3	2,151.5	2,461.5	2,414.9
Environmental biology	64.3	90.8	86.1	83.3	83.2	92.7	120.8	125.7	125.7	141.0	146.8
Agricultural	139.8	133.0	153.5	177.4	190.4	214.2	218.1	283.5	265.7	267.9	293.7
Medical sciences, total	467.7	560.1	657.0	706.2	793.4	878.9	1,015.3	1,145.4	1,196.6	1,341.0	1,573.2
Life sciences, n.e.c.	42.0	52.4	58.0	55.3	57.8	83.6	97.7	125.7	119.2	150.6	73.2
Psychology, total	67.5	75.1	84.2	91.0	89.9	92.9	107.9	132.8	133.0	147.1	177.8
Biological aspects	23.5	26.4	30.2	30.5	32.9	31.4	43.7	48.0	47.0	49.3	52.4
Social aspects	25.3	34.0	31.3	30.2	33.7	32.8	33.4	46.9	45.3	45.5	40.9
Psychological sci, n.e.c.	18.7	14.7	22.8	30.2	23.3	28.7	30.8	38.0	40.7	52.3	84.5
Physical sciences, total	941.4	1,050.0	1,220.6	1,324.9	1,393.8	1,587.2	1,728.0	1,815.2	1,914.4	2,096.0	2,199.6
Astronomy	209.8	280.6	279.4	274.2	271.1	354.5	379.6	400.7	453.1	504.5	458.5
Chemistry	203.3	224.8	256.9	298.2	312.0	362.2	403.4	425.0	433.4	445.1	470.8
Physics	518.8	535.6	668.2	735.4	790.7	855.1	921.4	959.9	1,003.4	1,072.3	1,205.5
Physical sciences, n.e.c.	9.5	8.9	16.1	17.1	20.0	15.4	23.6	29.7	24.7	74.2	64.8
Environmental sciences, total	451.3	457.3	522.4	532.8	520.0	580.1	656.7	699.7	749.1	781.0	872.7
Atmospheric sciences	163.3	169.2	179.0	173.8	163.2	172.6	192.2	209.2	240.4	243.8	280.7
Geological sciences	145.1	157.6	198.3	194.2	177.5	178.3	198.0	250.0	265.5	266.2	267.3
Oceanography	120.7	119.1	130.7	143.3	154.5	195.6	220.1	219.3	224.3	249.8	269.4
Environmental sci, n.e.c.	22.2	11.4	14.3	21.5	24.9	33.5	46.4	21.2	18.9	21.2	55.2
Math & computer sci, total	97.7	104.2	116.3	140.4	165.1	208.1	240.8	260.0	293.4	306.4	313.2
Mathematics	55.9	60.0	66.8	79.2	90.9	100.9	113.9	130.3	142.4	158.4	165.4
Computer sciences	40.3	43.0	46.2	52.2	67.4	90.4	104.8	116.1	131.4	128.5	125.5
Math & computer sci, n.e.c.	1.6	1.2	3.2	9.0	6.8	16.8	22.2	13.6	19.6	19.5	22.4
Engineering, total	392.6	434.7	465.2	526.0	610.5	689.5	845.0	884.2	968.5	989.5	1,006.2
Aeronautical	82.8	88.4	104.2	113.3	126.5	140.7	225.5	191.5	226.3	237.4	231.0
Astronautical	14.9	25.2	27.2	33.2	44.8	50.4	52.4	41.6	52.5	48.8	48.4
Chemical	24.1	24.6	26.1	31.3	35.2	50.4	55.5	74.4	73.0	77.5	88.6
Civil	10.8	14.2	22.0	23.4	32.0	32.4	41.9	43.6	45.2	45.7	46.1
Electrical	57.4	62.0	70.6	78.5	93.6	95.8	130.4	144.9	156.3	175.4	154.0
Mechanical	29.5	35.9	42.2	47.4	53.1	60.7	64.1	88.2	83.6	87.2	83.5
Metallurgy & materials	134.5	151.1	121.3	138.5	155.9	182.9	187.3	211.9	228.5	209.8	230.1
Engineering, n.e.c.	38.4	33.2	51.6	60.5	69.4	76.2	87.9	88.2	103.2	107.8	124.4
Social sciences, total	124.3	129.7	147.2	137.0	120.2	137.7	132.6	140.7	113.5	129.5	146.8
Anthropology	12.0	12.5	14.2	13.1	13.1	11.2	16.8	15.8	11.2	12.3	12.1
Economics	33.6	32.7	40.0	34.1	39.0	41.0	29.7	34.3	26.3	29.0	34.7
Political science	3.2	4.1	7.4	6.3	4.4	4.6	4.1	5.8	4.1	5.5	5.1
Sociology	18.6	18.4	25.4	22.6	18.7	32.8	33.9	32.4	30.0	34.3	36.8
Social sciences, n.e.c.	57.0	62.0	60.2	60.9	45.1	48.2	48.1	52.4	41.9	48.4	58.1
Other sciences, n.e.c.	35.4	50.0	63.9	65.4	56.1	73.3	68.8	99.4	122.5	130.9	255.5

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-108a. Federal obligations for basic research, by detailed field of science and engineering:
fiscal years 1989-99**

[Dollars in millions]

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Field of science and engineering	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all fields	10,602.0	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,942.2	15,861.5	16,913.8
Life sciences, total	4,915.7	5,177.5	5,433.6	5,841.7	6,288.8	6,472.1	6,601.3	6,879.0	7,203.8	7,687.6	8,322.2
Biol & agricultural, total	3,102.9	3,219.0	3,374.9	3,517.6	3,787.8	3,751.9	3,836.5	3,922.4	3,945.1	NA	NA
Biol (excl environmental)	2,647.2	2,742.2	2,868.5	2,981.8	3,222.5	3,139.2	3,248.3	3,387.2	3,391.0	NA	NA
Environmental biology	157.3	168.3	186.9	201.6	223.2	242.1	220.6	205.7	206.1	NA	NA
Agricultural	298.4	308.5	319.4	334.2	342.2	370.6	367.5	329.5	348.1	NA	NA
Medical sciences	1,708.4	1,849.6	1,857.7	2,131.0	2,380.9	2,610.3	2,615.9	2,740.8	3,035.2	NA	NA
Life sciences, n.e.c.	104.4	108.9	201.0	193.1	120.1	109.9	148.9	215.9	223.4	NA	NA
Psychology, total	187.1	215.1	225.5	122.6	246.8	246.1	278.0	291.5	293.9	303.9	332.3
Biological aspects	61.0	65.3	68.2	14.3	18.1	24.8	31.4	33.5	30.2	NA	NA
Social aspects	38.1	60.9	69.2	16.9	16.0	16.3	22.2	10.1	13.0	NA	NA
Psychological sci, n.e.c.	88.0	88.8	88.1	91.4	212.7	205.0	224.4	248.0	250.7	NA	NA
Physical sciences, total	2,506.5	2,661.5	2,881.5	2,951.4	2,907.1	2,826.9	2,864.8	2,862.6	2,976.4	3,126.6	3,304.9
Astronomy	524.6	579.9	612.3	729.7	663.4	724.8	731.6	708.8	754.2	NA	NA
Chemistry	504.6	502.1	538.7	556.6	543.7	540.3	559.4	550.7	517.8	NA	NA
Physics	1,395.3	1,474.3	1,644.9	1,607.5	1,600.6	1,502.3	1,507.4	1,545.6	1,561.7	NA	NA
Physical sciences, n.e.c.	81.9	105.1	85.5	57.6	99.4	59.6	66.4	57.4	142.6	NA	NA
Environmental sciences, total	1,016.9	1,274.8	1,263.5	1,303.6	1,533.5	1,516.5	1,467.5	1,554.0	1,543.5	1,640.9	1,675.5
Atmospheric sciences	316.4	443.7	449.0	435.2	635.1	698.3	688.2	671.2	679.5	NA	NA
Geological sciences	334.9	439.7	499.0	526.5	555.3	487.8	451.7	390.0	388.3	NA	NA
Oceanography	293.5	299.7	197.5	210.0	207.2	190.2	188.2	309.1	303.5	NA	NA
Environmental sci, n.e.c.	72.1	91.6	118.0	131.9	135.9	140.2	139.3	183.8	172.1	NA	NA
Math & computer sci, total	345.8	406.9	426.1	481.4	511.3	521.7	603.0	639.6	661.4	699.8	786.7
Mathematics	167.8	176.3	164.4	228.2	221.8	247.7	164.0	162.6	238.2	NA	NA
Computer sciences	159.5	225.2	223.5	247.7	284.3	262.3	317.1	376.8	389.5	NA	NA
Math & computer sci, n.e.c.	18.4	5.3	38.2	5.5	5.1	11.8	121.9	100.2	33.6	NA	NA
Engineering, total	1,183.7	1,101.5	1,233.7	1,249.8	1,207.4	1,290.4	1,448.9	1,612.1	1,583.0	1,696.4	1,712.8
Aeronautical	327.9	269.6	256.2	245.1	246.2	275.9	271.0	261.7	269.1	NA	NA
Astronautical	58.9	62.3	69.7	94.4	53.6	59.8	66.3	71.8	69.8	NA	NA
Chemical	50.1	75.8	101.7	105.0	72.8	70.9	66.7	59.8	68.1	NA	NA
Civil	51.7	47.3	59.3	53.4	38.7	38.1	70.1	52.9	45.4	NA	NA
Electrical	173.8	146.9	142.5	165.4	203.1	205.7	204.6	201.5	172.9	NA	NA
Mechanical	100.8	91.4	115.6	113.9	142.6	141.6	164.7	113.2	104.9	NA	NA
Metallurgy & materials	254.8	260.2	294.6	273.6	241.3	330.2	368.5	501.8	462.6	NA	NA
Engineering, n.e.c.	165.7	147.9	194.3	199.2	209.1	168.3	236.9	349.4	390.4	NA	NA
Social sciences, total	154.6	146.0	161.3	139.9	194.1	184.0	206.7	212.5	221.0	238.5	265.8
Anthropology	12.1	12.5	12.7	11.0	10.0	9.7	15.1	12.7	14.8	NA	NA
Economics	37.7	37.1	37.3	39.3	46.0	38.4	44.7	39.4	46.1	NA	NA
Political science	5.4	6.4	7.1	6.4	6.4	4.8	7.1	5.7	4.9	NA	NA
Sociology	38.2	24.2	28.2	10.2	11.1	13.1	14.3	13.3	8.2	NA	NA
Social sciences, n.e.c.	61.2	65.8	75.9	72.9	120.6	118.1	125.5	141.3	147.0	NA	NA
Other sciences, n.e.c.	291.7	302.3	545.6	399.4	510.1	465.6	406.9	412.8	459.3	467.8	513.7

NOTES: Because of rounding, detail may not add to totals.

During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-109. Federal obligations for applied research, by detailed field of science and engineering:
fiscal years 1978-88**

[Dollars in millions]

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Field of science and engineering	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	5,908.2	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5
Life sciences, total	1,838.7	1,956.5	2,137.9	2,211.8	2,219.5	2,286.6	2,348.3	2,575.9	2,605.5	2,979.5	3,222.7
Biol & agricultural, total	945.3	1,041.0	1,168.1	1,249.4	1,137.0	1,135.6	1,150.3	1,239.8	1,318.4	1,488.1	1,718.0
Biol (excl environmental)	614.0	646.7	730.8	794.9	678.1	683.7	727.3	779.3	841.9	1,040.5	1,266.8
Environmental biology	120.5	125.8	143.6	137.0	100.4	101.0	129.2	134.6	138.3	148.6	154.2
Agricultural	210.8	268.6	293.7	317.4	358.6	351.0	293.8	325.8	338.1	299.1	297.0
Medical sciences, total	819.8	820.5	879.9	903.7	979.6	1,048.5	1,097.5	1,223.1	1,163.8	1,323.8	1,367.8
Life sciences, n.e.c.	73.6	95.0	89.9	58.7	102.9	102.4	100.4	113.0	123.3	167.6	136.9
Psychology, total	109.2	122.3	114.8	117.9	128.5	147.9	158.8	194.3	201.0	222.4	212.0
Biological aspects	29.9	30.4	29.7	27.0	26.7	31.8	37.1	43.2	43.1	49.1	52.9
Social aspects	40.1	49.6	63.5	63.3	64.4	71.8	74.3	96.0	98.3	108.9	108.4
Psychological sci, n.e.c.	39.1	42.3	21.5	27.7	37.4	44.3	47.4	55.1	59.7	64.4	50.7
Physical sciences, total	704.2	742.6	780.0	895.6	1,106.5	1,304.3	1,241.0	1,230.8	1,154.6	1,156.6	1,117.7
Astronomy	3.8	3.8	6.3	6.8	4.7	3.0	2.7	14.1	15.1	17.7	12.3
Chemistry	201.7	218.8	197.6	188.7	169.2	158.1	203.0	225.4	229.0	235.2	232.3
Physics	423.6	487.1	514.4	610.2	819.8	999.5	915.0	856.1	802.6	781.4	769.8
Physical sciences, n.e.c.	75.1	32.8	61.8	89.9	112.9	143.7	120.3	135.2	107.9	122.4	103.3
Environmental sciences, total	573.3	643.7	738.6	588.2	628.3	671.2	619.2	704.0	732.6	730.6	734.3
Atmospheric sciences	155.9	179.5	230.5	199.6	262.6	288.1	242.0	276.8	280.9	309.1	307.1
Geological sciences	171.2	201.1	203.4	201.9	180.1	155.2	161.0	179.0	178.4	175.6	174.3
Oceanography	103.1	101.4	131.4	118.4	106.8	147.9	143.4	179.3	205.4	177.6	190.9
Environmental sci, n.e.c.	143.0	161.7	173.3	68.4	78.7	80.0	72.9	69.0	67.9	68.3	61.9
Math & computer sci, total	118.5	106.1	124.7	138.6	185.0	211.3	199.5	314.9	322.0	334.3	329.6
Mathematics	37.5	24.2	24.1	38.6	37.3	32.6	37.1	53.4	42.1	46.1	52.5
Computer sciences	67.0	63.3	82.4	69.3	103.5	124.1	109.7	164.2	171.0	169.3	167.2
Math & computer sci, n.e.c.	14.1	18.6	18.2	30.7	44.3	54.6	52.7	97.3	108.9	118.9	109.9
Engineering, total	2,028.6	2,137.0	2,364.9	2,545.4	2,776.1	2,827.5	2,779.1	2,733.4	2,770.4	2,916.8	2,950.2
Aeronautical	400.0	536.5	604.0	596.3	614.7	679.9	634.9	546.5	549.3	573.0	570.8
Astronautical	150.2	226.0	275.1	270.8	245.9	271.1	344.4	383.2	474.4	575.9	526.9
Chemical	125.3	89.7	70.2	116.3	59.9	94.6	88.9	179.9	172.8	138.3	169.5
Civil	131.6	110.8	136.8	135.8	169.9	156.0	161.0	173.0	157.8	158.7	168.7
Electrical	375.2	355.8	446.6	478.2	518.6	519.1	499.7	481.9	518.1	610.9	577.1
Mechanical	204.7	160.0	165.8	157.3	148.1	205.7	126.3	178.8	153.0	146.2	157.2
Metallurgy & materials	151.4	98.2	114.8	117.5	153.2	149.6	153.7	227.4	216.6	152.2	226.6
Engineering, n.e.c.	490.2	560.0	551.6	673.4	865.7	751.4	770.1	562.8	528.5	561.6	553.3
Social sciences, total	365.1	397.6	376.6	360.5	265.7	297.5	303.8	319.3	302.0	350.5	339.0
Anthropology	7.6	4.9	2.9	1.5	1.5	1.6	1.7	2.1	2.4	2.9	2.2
Economics	129.6	149.2	152.8	172.6	118.2	124.6	117.6	125.4	105.0	119.6	124.8
Political science	5.6	9.8	4.8	4.5	3.2	6.6	6.7	8.9	7.5	5.8	7.1
Sociology	41.7	46.1	46.1	42.4	33.3	35.0	36.3	34.0	37.0	39.6	45.0
Social sciences, n.e.c.	180.6	187.6	170.1	139.5	109.6	129.8	141.4	148.9	150.2	182.6	159.9
Other sciences, n.e.c.	170.4	236.6	285.7	313.5	231.0	247.1	261.7	242.2	260.9	307.4	271.0

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-109a. Federal obligations for applied research, by detailed field of science and engineering:
fiscal years 1989-99**

[Dollars in millions]

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Field of science and engineering	1989	1990	1991	1992	1993	1994	1995	1996	1997	Preliminary	
										1998	1999
Total, all fields	10,163.5	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,609.0	16,078.6
Life sciences, total	3,579.4	3,652.3	4,188.4	4,068.8	4,483.3	4,812.2	5,209.8	5,185.3	5,457.6	5,933.2	6,064.2
Biol & agricultural, total	1,917.2	1,959.4	2,223.0	2,116.0	2,271.5	2,351.1	2,566.0	2,707.6	2,598.9	NA	NA
Biol (excl environmental)	1,336.0	1,402.5	1,589.3	1,453.2	1,567.4	1,606.6	1,677.1	1,922.8	1,929.2	NA	NA
Environmental biology	210.5	174.0	272.8	309.4	333.3	387.8	586.2	498.3	376.4	NA	NA
Agricultural	370.7	382.9	360.9	353.4	370.8	356.7	302.8	286.5	293.2	NA	NA
Medical sciences	1,514.1	1,532.7	1,602.6	1,778.9	2,023.5	2,251.8	2,356.3	2,232.6	2,497.6	NA	NA
Life sciences, n.e.c.	148.1	160.2	362.9	173.9	188.2	209.3	287.4	245.2	361.1	NA	NA
Psychology, total	234.5	233.5	256.9	175.6	303.9	302.2	344.6	233.5	251.5	274.1	280.1
Biological aspects	60.8	65.3	72.0	20.3	19.1	23.3	27.4	29.3	27.6	NA	NA
Social aspects	111.8	116.5	128.2	84.1	118.7	100.5	134.1	73.4	83.7	NA	NA
Psychological sci, n.e.c.	61.9	51.7	56.7	71.2	166.1	178.4	183.1	130.8	140.2	NA	NA
Physical sciences, total	1,198.8	1,147.2	1,353.9	1,487.7	1,519.8	1,426.5	1,413.5	1,060.4	1,172.4	1,208.4	1,273.0
Astronomy	17.3	17.2	19.3	9.4	22.8	22.8	32.9	20.2	20.6	NA	NA
Chemistry	278.0	259.6	289.7	339.6	299.5	334.2	304.1	330.4	327.6	NA	NA
Physics	795.5	780.6	816.0	970.7	1,037.7	940.9	943.8	445.7	505.9	NA	NA
Physical sciences, n.e.c.	108.0	89.8	228.9	168.1	159.8	128.7	132.7	264.2	318.3	NA	NA
Environmental sciences, total	756.3	899.3	886.3	904.0	1,075.0	1,321.7	1,387.0	1,465.7	1,502.2	1,646.7	1,585.5
Atmospheric sciences	271.6	329.7	353.7	332.0	349.0	396.7	447.3	414.6	484.8	NA	NA
Geological sciences	207.8	221.4	229.7	209.2	242.6	350.1	396.6	394.3	303.5	NA	NA
Oceanography	198.4	220.4	201.0	248.9	260.2	306.6	219.1	265.2	294.2	NA	NA
Environmental sci, n.e.c.	78.5	127.8	101.7	113.8	223.3	268.3	324.0	391.7	419.7	NA	NA
Math & computer sci, total	389.7	433.9	477.6	678.9	714.1	779.9	976.1	932.0	1,010.5	1,131.1	1,468.3
Mathematics	68.3	65.0	63.2	90.5	68.9	94.7	94.6	91.8	63.4	NA	NA
Computer sciences	205.1	336.9	361.4	524.0	541.8	567.9	696.8	743.1	875.1	NA	NA
Math & computer sci, n.e.c.	116.3	31.9	52.9	64.3	103.4	117.3	184.7	97.1	71.9	NA	NA
Engineering, total	3,258.4	3,125.1	3,710.8	3,727.1	4,292.0	4,189.0	4,259.5	4,068.9	4,107.3	4,393.6	4,310.2
Aeronautical	658.9	657.5	760.0	629.5	946.8	946.8	977.2	987.6	1,083.7	NA	NA
Astronautical	618.5	518.5	583.4	536.0	440.4	439.3	480.2	454.7	526.5	NA	NA
Chemical	92.2	166.0	202.6	192.5	172.7	167.3	179.4	155.4	166.9	NA	NA
Civil	178.1	270.4	245.7	276.9	213.3	239.8	269.3	247.3	230.2	NA	NA
Electrical	669.3	493.1	587.4	593.6	678.4	536.1	551.7	468.3	449.3	NA	NA
Mechanical	156.5	176.9	220.0	223.4	324.3	236.5	247.8	180.8	149.7	NA	NA
Metallurgy & materials	266.2	294.3	416.1	453.6	454.3	521.2	446.9	487.2	398.1	NA	NA
Engineering, n.e.c.	618.8	548.4	695.4	821.6	1,061.7	1,102.0	1,107.1	1,087.6	1,102.8	NA	NA
Social sciences, total	396.4	484.0	566.0	549.8	480.8	463.3	472.0	442.1	475.3	585.2	617.2
Anthropology	1.8	1.9	3.3	3.1	3.7	6.6	6.6	5.6	6.2	NA	NA
Economics	129.1	160.1	150.1	172.3	158.7	154.9	161.8	154.8	158.1	NA	NA
Political science	8.1	6.8	10.0	16.1	22.8	20.6	15.2	10.9	9.6	NA	NA
Sociology	55.9	92.0	155.7	70.5	65.6	55.0	33.5	27.9	17.6	NA	NA
Social sciences, n.e.c.	201.6	223.3	246.9	287.9	229.9	226.2	254.9	242.8	283.8	NA	NA
Other sciences, n.e.c.	350.0	361.5	357.8	408.8	622.4	592.8	494.9	407.9	446.8	436.6	480.2

NOTES: Because of rounding, detail may not add to totals.

During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-110. Federal obligations for research and development for selected agencies, by State:
fiscal years 1978-88**

[Dollars in millions]

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State	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	25,077.7	27,084.2	28,627.3	31,929.6	35,361.6	37,627.8	41,148.5	47,214.8	50,310.2	54,067.4	55,471.0
Alabama	432.0	516.9	455.7	493.5	561.5	671.7	792.6	896.6	1,188.2	1,346.4	1,363.7
Alaska	48.7	45.9	42.5	51.8	40.0	40.4	47.7	51.5	49.4	48.8	50.5
Arizona	163.4	201.4	334.6	367.7	264.5	469.3	383.9	458.2	398.1	414.9	369.4
Arkansas	42.4	37.3	30.0	31.2	43.5	31.4	35.0	39.7	40.5	52.3	56.4
California	5,839.2	6,338.6	6,097.7	7,049.7	8,888.3	8,194.9	8,995.8	10,771.8	11,512.3	13,672.2	14,895.9
Colorado	393.2	442.2	573.7	632.8	556.6	436.2	531.6	629.2	1,636.4	1,516.3	1,408.4
Connecticut	299.8	328.4	470.3	485.0	439.6	743.3	675.9	742.8	577.3	672.2	619.5
Delaware	11.1	14.4	20.8	25.9	34.6	20.4	63.7	34.7	30.2	32.3	36.0
District of Columbia	790.2	768.4	807.0	921.0	954.6	1,196.1	1,796.0	2,077.7	2,324.0	2,209.2	2,925.3
Florida	890.1	913.1	1,120.8	1,373.7	1,776.4	1,276.0	1,138.1	1,205.2	1,448.0	2,297.3	2,133.4
Georgia	155.7	184.4	169.8	195.0	217.3	237.2	245.5	291.8	250.5	352.1	350.4
Hawaii	44.6	40.8	42.6	49.9	44.5	71.4	52.9	58.2	54.7	63.9	82.2
Idaho	107.0	147.1	147.7	119.5	127.0	223.4	195.2	259.7	266.6	232.7	250.1
Illinois	564.3	547.2	599.9	572.6	543.0	567.5	675.6	772.8	745.0	827.3	850.7
Indiana	108.1	122.0	162.4	170.1	186.2	213.6	236.0	227.7	295.1	339.4	312.1
Iowa	68.3	84.9	121.7	147.4	136.3	95.2	134.5	150.3	224.3	162.4	197.1
Kansas	106.6	136.3	353.6	471.0	637.7	97.4	101.9	138.1	112.7	94.2	126.7
Kentucky	62.1	43.0	107.9	101.0	97.2	93.1	56.5	69.2	59.1	61.9	68.5
Louisiana	162.7	209.1	196.3	331.8	236.8	186.6	129.7	118.8	92.4	107.4	101.3
Maine	25.4	23.1	25.9	24.4	23.9	29.3	38.1	36.7	35.6	178.6	39.8
Maryland	2,091.0	2,299.8	2,465.0	2,585.1	2,850.2	3,412.4	3,917.9	4,371.6	4,512.5	4,036.3	4,355.3
Massachusetts	1,689.3	2,055.6	2,047.7	2,407.1	2,775.2	2,559.3	2,882.6	3,276.7	3,240.3	3,910.8	2,702.0
Michigan	367.8	264.4	377.5	357.2	376.7	412.5	479.4	502.1	460.5	463.3	417.5
Minnesota	177.7	202.8	261.6	309.0	378.6	448.2	636.8	718.7	515.4	506.6	576.8
Mississippi	87.1	100.7	109.3	125.5	125.7	185.8	145.5	172.4	143.4	184.4	185.1
Missouri	827.3	778.9	801.6	820.4	911.3	576.8	659.5	694.2	677.8	614.7	637.6
Montana	27.5	41.6	45.7	45.4	42.7	35.0	26.6	26.0	26.4	30.1	35.5
Nebraska	33.5	31.3	31.6	31.7	32.0	42.3	33.0	34.6	41.1	48.9	52.1
Nevada	196.7	222.1	214.5	263.0	376.3	647.1	440.5	490.4	462.6	462.0	443.3
New Hampshire	68.7	94.1	50.2	54.8	50.8	76.8	116.4	130.3	136.0	83.6	60.8
New Jersey	522.5	649.3	729.4	775.4	887.9	1,293.4	1,550.0	1,791.8	1,781.4	1,114.9	1,209.3
New Mexico	987.4	955.5	954.2	1,224.1	1,322.6	1,804.9	2,104.8	2,368.6	2,500.0	1,998.2	2,296.1
New York	1,284.1	1,362.2	1,468.8	1,557.7	1,692.5	2,523.2	2,493.4	3,128.4	3,163.5	2,941.8	2,688.7
North Carolina	192.3	220.9	227.7	259.8	272.7	312.5	378.3	485.7	497.7	583.8	625.0
North Dakota	28.3	33.4	38.7	40.1	36.5	27.2	37.8	32.7	27.2	29.4	32.5
Ohio	858.3	1,053.2	1,054.7	1,117.2	1,024.8	1,170.1	1,366.5	1,520.5	1,591.7	1,862.9	1,865.2
Oklahoma	105.0	70.1	94.5	82.4	65.6	67.9	65.5	81.3	69.8	99.4	103.7
Oregon	95.3	100.1	97.9	105.6	106.3	108.0	137.8	151.6	127.6	133.9	170.3
Pennsylvania	995.7	1,099.9	1,059.4	1,082.9	1,131.5	1,173.3	1,142.2	1,329.6	1,301.3	1,681.9	1,731.6
Rhode Island	120.3	140.7	149.9	182.5	242.1	267.5	306.1	334.3	392.7	365.4	335.6
South Carolina	118.3	114.3	87.5	96.1	98.7	104.6	119.8	119.9	122.5	123.7	148.7
South Dakota	9.1	10.2	9.9	10.2	19.0	12.4	14.0	14.4	14.6	12.8	13.1
Tennessee	644.3	644.1	722.9	883.6	702.3	435.5	546.7	556.3	591.3	732.0	567.2
Texas	1,003.8	1,000.1	908.6	1,031.7	1,054.3	1,412.6	1,473.8	1,664.6	1,912.0	2,261.3	2,514.9
Utah	161.8	211.6	243.9	305.7	287.9	268.9	232.4	250.9	274.6	427.3	462.0
Vermont	23.7	16.7	36.6	18.7	35.7	23.7	33.8	36.1	41.1	39.6	55.9
Virginia	857.1	945.1	1,059.3	1,066.4	1,268.1	2,286.1	2,247.2	2,472.4	2,810.0	2,292.5	2,729.1
Washington	878.3	864.7	951.8	1,047.5	1,038.9	709.3	881.8	1,036.5	1,153.9	1,878.8	1,765.6
West Virginia	73.3	107.2	152.0	151.2	91.0	82.5	73.3	66.5	88.7	115.8	113.4
Wisconsin	111.9	111.0	121.7	132.2	129.4	142.4	166.0	200.8	181.9	204.8	223.2
Wyoming	40.8	41.0	53.9	58.2	25.4	28.4	34.0	25.1	14.5	23.5	29.0
Outlying areas	38.7	39.4	45.3	38.9	40.7	32.0	44.9	62.8	36.8	42.9	33.0
Offices abroad	45.9	57.7	73.5	47.2	59.0	51.0	34.6	35.9	59.2	78.2	54.2

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-110a. Federal obligations for research and development for selected agencies, by State:
fiscal years 1989-97**

[Dollars in millions]

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State	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total	59,485.0	62,105.2	59,865.4	64,089.7	65,743.8	65,820.1	66,700.1	66,294.4	68,512.9
Alabama	1,646.7	1,805.4	1,863.2	2,151.7	2,149.4	1,819.2	1,931.3	2,178.8	2,213.7
Alaska	71.3	90.7	102.7	93.0	92.7	157.3	96.9	93.3	99.9
Arizona	501.2	591.7	516.8	638.2	535.3	800.2	902.3	706.7	732.1
Arkansas	57.0	85.7	85.9	68.8	79.2	88.9	97.7	148.2	95.7
California	15,919.4	16,249.3	14,488.3	15,999.1	14,883.7	11,250.6	12,697.7	12,658.3	13,731.2
Colorado	1,618.1	1,888.3	2,694.2	1,479.2	1,343.4	1,356.4	951.7	1,277.6	1,340.2
Connecticut	596.7	509.8	672.7	578.3	522.2	733.5	900.7	799.0	846.5
Delaware	31.9	28.3	41.8	43.1	56.2	50.4	57.7	64.9	49.0
District of Columbia	1,914.9	1,593.1	1,943.7	2,185.2	2,488.8	2,483.6	2,755.4	2,573.4	2,232.3
Florida	2,269.8	2,343.4	2,181.1	2,832.3	2,775.3	2,906.7	2,391.8	2,957.9	3,326.4
Georgia	392.5	364.1	466.5	2,512.6	3,035.3	5,546.4	4,366.0	4,137.8	3,919.9
Hawaii	97.4	100.0	112.6	150.7	113.0	140.3	139.3	147.6	150.7
Idaho	195.9	326.1	279.1	299.5	303.7	227.8	211.0	244.6	205.7
Illinois	909.1	957.2	959.4	921.9	963.8	1,088.6	1,107.4	1,094.3	1,140.2
Indiana	392.5	363.6	378.7	367.0	513.6	403.6	426.3	439.8	410.6
Iowa	190.9	186.7	209.8	194.7	215.8	223.8	212.1	213.4	228.2
Kansas	128.8	116.4	83.6	91.2	87.9	84.8	120.4	212.0	255.5
Kentucky	73.0	96.5	122.4	71.7	86.7	90.1	73.1	78.6	91.3
Louisiana	179.6	121.2	163.6	169.6	152.6	210.5	170.1	228.7	211.0
Maine	67.7	39.7	57.1	60.6	65.2	82.1	53.1	56.7	68.7
Maryland	4,849.0	5,332.1	5,569.0	5,779.7	7,238.5	6,659.5	7,343.7	6,730.7	7,328.9
Massachusetts	2,882.5	2,982.8	3,146.8	3,227.9	3,551.7	3,201.8	3,337.8	3,192.1	3,438.0
Michigan	686.2	810.8	772.6	876.3	878.0	771.0	683.2	707.9	735.2
Minnesota	597.3	529.8	455.7	456.4	445.5	475.1	570.2	679.5	609.4
Mississippi	198.7	471.7	230.6	255.7	259.8	255.9	209.7	250.6	289.8
Missouri	1,241.9	1,064.3	587.9	733.5	726.3	2,272.6	1,606.2	1,267.8	1,130.1
Montana	36.2	30.9	45.8	71.5	69.1	57.0	63.8	63.0	79.3
Nebraska	51.2	76.4	76.1	71.1	78.5	86.5	84.7	88.5	83.0
Nevada	427.5	484.7	496.0	465.8	406.2	347.7	368.9	253.2	295.0
New Hampshire	98.0	145.1	196.3	156.1	237.6	218.9	213.2	268.5	278.7
New Jersey	1,320.4	1,601.6	1,698.3	1,646.8	1,422.8	1,385.7	1,297.7	1,272.6	1,318.8
New Mexico	2,220.4	2,311.3	2,018.7	2,211.3	2,309.6	1,894.1	1,959.9	1,955.0	1,933.1
New York	2,904.1	2,960.8	3,086.6	3,058.7	2,538.0	2,678.7	2,585.9	2,504.9	2,471.2
North Carolina	562.8	618.6	673.8	700.7	719.1	734.3	831.6	821.5	900.9
North Dakota	33.3	53.1	43.7	54.2	50.3	49.6	47.4	46.2	53.0
Ohio	1,938.8	2,088.5	1,729.9	1,863.4	1,921.7	1,736.4	1,810.0	1,681.9	1,879.8
Oklahoma	117.6	162.6	131.5	126.1	117.9	142.1	158.7	138.3	160.4
Oregon	168.4	175.6	216.5	226.5	229.4	279.2	283.4	308.2	319.6
Pennsylvania	1,961.9	2,074.6	2,125.8	1,794.4	2,566.5	1,983.4	2,394.2	1,923.5	1,893.9
Rhode Island	314.1	391.1	433.8	386.3	495.6	433.8	514.6	583.2	403.8
South Carolina	222.6	230.9	250.4	172.1	173.2	198.5	173.2	186.7	166.6
South Dakota	15.0	15.7	22.5	23.9	26.9	26.5	26.5	35.0	42.0
Tennessee	576.0	825.0	732.2	666.0	674.4	671.3	582.5	558.6	566.2
Texas	3,189.2	3,496.8	2,321.4	2,873.0	2,546.2	3,654.3	4,068.9	3,493.5	3,640.2
Utah	517.8	437.7	429.1	314.0	298.8	324.9	368.8	351.7	319.8
Vermont	60.1	42.5	56.1	51.3	62.1	48.5	53.0	47.1	49.9
Virginia	2,778.0	2,733.5	2,909.0	3,231.3	3,402.6	3,726.9	3,392.2	4,576.3	4,849.8
Washington	1,766.2	1,567.0	1,241.1	900.5	878.1	963.8	1,131.6	1,152.9	1,226.2
West Virginia	104.0	116.6	177.9	166.4	206.2	212.9	287.9	254.4	193.1
Wisconsin	263.5	271.7	294.5	307.7	350.8	358.3	338.5	331.4	332.2
Wyoming	38.5	57.4	29.8	41.4	48.2	36.8	35.4	37.5	28.4
Outlying areas	45.7	54.9	221.7	246.9	332.7	166.3	166.5	172.6	93.3
Puerto Rico	NA	NA	NA	NA	NA	50.5	46.7	51.6	58.9
Other Areas	NA	NA	NA	NA	NA	115.8	119.8	121.0	34.3
Offices abroad	43.4	31.7	21.0	24.4	17.8	23.1	48.0	48.5	54.6

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-111. Federal obligations for R&D plant for selected agencies, by State:
fiscal years 1978-88**

[Dollars in millions]

Page 1 of 1

State	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	1,262.0	1,393.8	1,533.1	1,454.4	1,380.1	1,280.9	1,770.6	1,774.7	1,482.5	1,793.8	2,025.1
Alabama	6.5	2.6	47.9	16.5	5.8	6.0	26.4	41.4	41.2	42.8	51.8
Alaska .....	.7	.8	.1	-	-	21.3	.1	12.9	.0	.0	6.4
Arizona	33.9	35.3	1.8	.4	.4	5.4	3.6	2.9	1.7	19.6	21.8
Arkansas .....	.9	.2	.7	.7	1.0	1.5	.5	.5	.9	.5	.4
California	259.5	400.2	377.4	355.4	334.6	368.4	316.8	404.2	323.5	290.7	429.0
Colorado	11.6	9.7	35.6	26.9	16.6	43.9	52.3	32.4	16.3	12.8	53.5
Connecticut	2.3	12.3	1.0	9.2	25.1	5.5	5.2	8.4	1.2	.4	1.0
Delaware	-	.0	.7	1.6	.1	.4	.6	.4	.4	.4	1.3
District of Columbia	11.1	22.0	14.3	31.7	33.6	24.6	62.4	92.5	28.0	24.1	15.4
Florida	81.1	46.0	46.7	25.5	31.8	37.2	91.2	42.8	53.2	64.6	86.0
Georgia	1.8	1.0	.6	1.6	1.5	2.1	3.8	2.6	15.6	23.1	2.7
Hawaii .....	.7	.5	.2	.7	.1	1.6	.6	.9	.6	.6	6.9
Idaho	35.6	41.8	45.1	11.9	21.4	19.7	11.9	8.3	24.7	17.8	39.6
Illinois	72.9	61.9	71.5	74.1	74.3	80.3	81.2	110.1	96.6	94.3	76.7
Indiana .....	.4	.7	.7	.9	.6	1.3	2.8	4.5	.5	5.8	1.9
Iowa	2.3	2.2	2.9	2.1	2.2	2.7	3.5	1.4	3.3	22.7	3.8
Kansas .....	.2	-	.1	.1	.1	.2	.3	2.3	41.0	49.8	.1
Kentucky	-	2.9	-	4.3	1.4	.4	.3	.3	.3	1.7	.1
Louisiana	20.9	16.7	12.6	14.1	22.2	2.4	2.6	2.0	2.2	2.5	31.9
Maine .....	.1	.1	-	-	-	-	-	-	-	-	.3
Maryland	82.7	64.3	53.3	52.3	82.2	80.8	180.1	145.4	78.6	109.8	79.2
Massachusetts	28.7	36.9	20.4	35.7	23.3	29.4	62.8	66.1	17.7	36.3	94.2
Michigan	1.9	3.0	8.3	9.5	7.8	1.1	6.4	5.1	1.2	1.4	4.4
Minnesota	1.2	.8	.3	.5	.4	.8	3.1	.8	1.1	.4	.7
Mississippi	6.0	3.8	6.6	3.4	5.9	6.4	13.7	12.6	13.5	39.1	19.1
Missouri	1.2	5.6	40.9	1.8	5.7	6.0	3.9	3.7	4.7	4.8	2.7
Montana	-	1.2	3.7	.1	.1	.2	.2	.2	.2	.2	.2
Nebraska .....	.3	.8	2.1	.6	.7	.5	.7	.4	7.3	1.4	4.1
Nevada	18.5	24.2	22.4	82.9	30.0	33.0	108.4	155.2	69.9	87.0	103.3
New Hampshire	1.3	5.4	-	7.7	.1	.7	.1	.4	.3	.2	-
New Jersey	96.7	64.8	60.5	55.7	57.0	42.0	52.7	40.1	37.6	39.8	52.6
New Mexico	101.7	138.6	169.5	119.3	196.6	191.8	102.3	243.7	192.0	256.6	231.4
New York	63.8	69.4	91.4	85.1	65.0	77.0	175.0	75.3	105.0	113.4	115.3
North Carolina	3.5	3.9	8.2	1.2	1.4	4.1	3.6	10.4	2.2	3.4	.9
North Dakota	2.3	1.4	4.1	1.4	1.2	.9	.9	1.3	8.8	.8	9.2
Ohio	23.9	28.0	40.3	65.2	23.7	7.5	49.6	46.5	19.2	58.1	68.5
Oklahoma	1.0	.6	3.2	2.7	1.2	1.3	.9	1.7	2.3	.9	10.7
Oregon	2.6	.9	3.9	1.0	.1	.2	3.4	1.2	12.0	24.7	8.6
Pennsylvania	28.8	46.5	35.5	95.2	51.1	19.2	20.1	18.7	19.0	41.4	56.3
Rhode Island	2.4	3.5	2.6	1.6	2.1	1.9	.7	31.6	5.5	6.4	2.0
South Carolina	6.9	9.7	3.1	18.8	65.2	49.6	146.4	7.5	5.7	19.6	8.2
South Dakota .....	.1	1.6	3.1	.7	.9	.2	.1	.1	-	.1	.6
Tennessee	43.4	55.8	80.1	85.5	65.2	27.3	69.9	33.8	30.8	29.3	57.2
Texas	11.8	9.7	14.2	13.9	10.2	4.7	9.6	19.4	79.7	75.1	40.7
Utah	8.0	2.9	1.9	1.5	3.1	.5	2.0	2.4	13.6	14.2	6.8
Vermont .....	.0	-	.0	-	.0	.0	.0	.0	.0	1.0	8.0
Virginia	29.3	42.0	41.5	33.9	21.1	29.4	52.2	26.7	45.5	89.4	105.5
Washington	118.3	86.8	128.2	89.0	80.8	12.0	13.6	32.7	26.4	24.8	31.2
West Virginia	17.0	13.1	12.9	3.7	1.1	23.3	4.8	11.4	10.2	16.5	23.2
Wisconsin	9.6	2.9	2.5	3.0	1.0	1.9	10.2	5.6	2.7	4.0	2.0
Wyoming .....	.9	1.2	4.3	2.0	1.2	.1	.3	.1	.1	.3	.2
Outlying areas	1.7	.5	2.9	.7	.5	.2	3.3	1.4	13.9	18.2	46.5
Offices abroad	3.9	7.1	1.1	1.3	1.4	1.7	3.5	2.3	4.5	1.0	.9

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

KEY: - = Amount less than 50 thousand dollars

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

**Table C-111a. Federal obligations for R&D plant for selected agencies, by State:
fiscal years 1989-97**

[Dollars in millions]

Page 1 of 1

State	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total	2,144.3	2,230.1	2,807.0	2,962.9	3,054.5	2,196.2	2,210.8	1,736.6	1,879.2
Alabama	47.2	109.7	165.0	346.1	368.2	94.1	44.1	48.9	43.4
Alaska .....	.0	11.1	.2	.8	1.0	88.0	1.4	.2	3.0
Arizona	18.1	2.5	16.4	7.9	16.9	20.8	42.7	3.0	1.9
Arkansas	3.1	2.2	5.3	4.4	3.3	3.9	3.9	12.5	14.1
California	446.7	459.0	377.8	356.1	469.6	209.5	414.0	341.2	407.0
Colorado	62.5	32.3	50.7	55.6	30.0	36.9	31.2	28.4	52.6
Connecticut	1.4	1.8	2.6	2.6	14.4	3.8	5.2	3.6	5.2
Delaware .....	.2	-	-	.1	2.1	1.1	1.9	2.0	2.4
District of Columbia	17.1	7.4	16.3	17.8	13.3	11.2	3.0	4.6	7.0
Florida	100.0	68.3	132.1	143.1	73.5	101.7	40.6	65.3	66.1
Georgia	10.8	3.6	6.0	6.4	3.5	5.3	12.4	4.6	5.2
Hawaii .....	.4	1.4	9.2	6.5	19.3	14.3	.5	1.7	3.0
Idaho	12.0	30.3	46.0	39.6	27.4	12.5	8.9	19.2	26.2
Illinois	94.9	116.3	319.7	183.9	201.6	208.5	190.0	147.3	134.3
Indiana	1.5	1.3	5.0	8.4	22.6	4.1	4.8	15.2	7.9
Iowa	6.2	10.4	26.1	5.2	7.9	10.1	15.5	10.1	8.9
Kansas	1.6	3.1	5.2	2.5	10.1	10.6	1.2	1.5	1.4
Kentucky .....	.5	.7	1.6	.0	.0	3.9	4.7	2.4	.4
Louisiana	47.2	33.6	26.1	26.2	29.5	21.0	21.5	26.5	18.6
Maine .....	.1	.7	.7	1.5	1.0	1.9	.7	.2	.3
Maryland	120.1	178.9	235.9	229.7	264.6	196.2	390.3	240.2	299.6
Massachusetts	54.7	78.2	32.5	20.2	22.3	15.8	23.1	14.1	12.1
Michigan	4.6	6.6	3.0	9.1	21.7	4.5	3.7	6.3	5.0
Minnesota	1.8	1.1	2.1	2.5	3.0	17.2	5.1	6.3	2.6
Mississippi	41.1	47.4	50.8	41.6	42.2	31.9	36.5	32.8	38.8
Missouri	3.7	1.9	6.5	1.7	1.5	4.7	4.6	4.4	5.7
Montana .....	.2	.5	1.6	2.7	1.6	3.6	4.9	5.8	9.6
Nebraska	2.8	4.1	6.0	5.7	1.0	1.0	2.3	1.0	.8
Nevada	69.3	61.1	57.7	59.7	50.2	26.9	38.5	16.1	1.0
New Hampshire .....	.2	.3	.3	4.0	.8	.3	.0	.6	2.3
New Jersey	46.8	51.3	30.0	39.0	53.2	45.3	34.9	26.7	29.9
New Mexico	239.6	197.9	175.5	164.7	181.4	152.6	133.8	77.5	124.8
New York	101.6	100.6	107.2	194.5	177.7	186.1	159.1	164.6	152.2
North Carolina	4.3	3.4	7.4	6.8	36.6	40.0	25.7	20.5	27.4
North Dakota	6.0	7.4	9.0	7.4	5.5	5.8	4.9	1.5	3.7
Ohio	69.8	56.3	115.4	122.2	64.1	128.1	147.5	67.5	49.7
Oklahoma	4.5	1.5	3.3	4.1	1.0	1.9	2.8	3.2	6.7
Oregon	30.1	12.3	3.3	1.8	13.8	6.5	5.2	8.1	5.9
Pennsylvania	79.0	36.0	89.5	52.0	95.7	72.2	35.4	51.3	40.8
Rhode Island	1.6	.8	14.3	1.9	.6	.6	7.3	3.9	4.6
South Carolina	8.9	3.7	31.9	4.1	4.9	14.7	2.7	2.2	10.3
South Dakota .....	.3	1.7	2.0	1.5	1.0	5.6	4.3	3.0	.4
Tennessee	58.8	62.4	63.2	48.1	29.5	77.4	37.1	22.9	38.7
Texas	97.6	210.6	218.0	465.7	429.1	56.6	84.2	56.5	62.8
Utah	12.1	2.5	3.5	1.5	3.5	6.7	4.6	2.6	2.8
Vermont	1.4	.4	.8	.0	.1	.6	.0	2.2	.5
Virginia	127.4	128.7	175.5	172.4	131.0	126.6	81.1	69.7	56.6
Washington	35.5	44.2	34.5	54.3	71.6	71.5	64.3	71.8	64.8
West Virginia	26.7	12.4	89.4	9.7	8.4	4.8	5.4	2.6	2.8
Wisconsin	4.0	4.4	13.0	10.2	8.0	24.6	9.6	3.0	2.0
Wyoming .....	.1	.2	.7	1.8	.6	1.8	1.5	.5	.6
Outlying areas	1.5	14.9	11.0	6.9	13.1	.5	1.4	8.3	4.3
Puerto Rico	NA	NA	NA	NA	NA	.4	.3	.3	.4
Other Areas	NA	NA	NA	NA	NA	-	1.1	8.1	3.9
Offices abroad	16.8	.3	.5	.6	.6	.7	1.3	.5	.3

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

KEY: - = Amount less than 50 thousand dollars
NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

APPENDIX A.

AGENCIES INCLUDED IN THIS SURVEY,
VOLUMES 28 TO 47

LIST OF TABLES

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A.1. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 28-37	295
A.2. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 38-47	299

Table A-1. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 28 37

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Agency	Vol 28	Vol 29	Vol 30	Vol 31	Vol 32	Vol 33	Vol 34	Vol 35	Vol 36	Vol 37
Department of Agriculture	T	T	T	T	T	T	T	T	T	T
Agricultural Cooperative Service.....	N	N	x	x	x	x	x	x	x	x
Agricultural Marketing Service.....	O	x	x	x	x	x	x	x	x	x
Agricultural Research Service	N	N	N	x	x	x	x	x	x	x
Agricultural Stabilization & Conservation Service	O	O	O	O	O	O	O	O	O	O
Animal & Plant Health Inspection Service.....	O	O	O	O	O	O	O	O	x	x
Cooperative State Research, Education, & Extension Service.....	N	N	N	x	x	x	x	x	x	x
Economic Research Service	N	N	N	x	x	x	x	x	x	x
Economics, Statistics, & Cooperative Service.....	x	x	N	N	N	N	N	N	N	N
Economics & Statistics Service.....	N	N	x	N	N	N	N	N	N	N
Food Safety Inspection Service.....	N	N	N	O	O	O	O	O	O	O
Foreign Agricultural Service.....	N	N	N	N	N	N	O	O	O	O
Forest Service.....	x	x	x	x	x	x	x	x	x	x
Grain Inspection Packers & Stockyards Administration.....	O	O	O	O	O	O	O	x	x	x
Human Nutrition Information Service	N	N	N	x	x	x	x	x	x	X
National Agricultural Statistics Service.....	N	N	N	x	x	x	x	x	x	x
Office of International Cooperation & Development	N	x	x	x	x	x	x	x	x	x
Office of Transportation.....	N	x	x	x	x	x	x	x	x	x
Rural Business-Cooperative Service.....	N	N	N	N	N	N	N	N	N	N
Science & Education Administration.....	T	T	T	N	N	N	N	N	N	N
Agricultural Research Service	x	x	x	N	N	N	N	N	N	N
Cooperative State Research Service.....	x	x	x	N	N	N	N	N	N	N
Department of Commerce.....	T	T	T	T	T	T	T	T	T	T
Bureau of the Census.....	x	x	x	x	x	x	x	x	x	x
Economic Development Administration	x	x	x	x	x	x	x	x	x	x
Maritime Administration	x	x	x	N	N	N	N	N	N	N
Minority Business Development Agency.....	O	O	O	O	O	O	O	O	O	O
National Fire Prevention & Control Administration	N	N	N	N	N	N	N	N	N	N
National Institute of Standards & Technology.....	x	x	x	x	x	x	x	x	x	x
National Oceanic & Atmospheric Administration	x	x	x	x	x	x	x	x	x	x
National Telecommunications & Information Administration.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary	O	x	x	x	x	x	x	x	x	x
Patent & Trademark Office	x	x	x	x	x	O	O	O	O	O
Department of Defense	O	O	O	O	O	O	O	O	O	O
Department of the Army, Civil Functions.....	T	T	T	T	T	T	T	T	T	T
Department of the Army, Military Functions.....	x	x	x	x	x	x	x	x	x	x
Military Construction	x	x	x	x	x	x	x	x	x	x
Pay & Allowances of Military Personnel in R&D	x	x	x	x	x	x	x	x	x	O
RDT&E Appropriation	x	x	x	x	x	x	x	x	x	O
Special Foreign Currency Program.....	x	x	x	x	x	x	x	x	x	O
Department of the Navy.....	O	O	O	O	O	O	x	x	x	O
Military Construction	x	x	x	x	x	x	x	x	x	x
Pay & Allowances of Military Personnel in R&D	x	x	x	x	x	x	x	x	x	O
RDT&E Appropriation	x	x	x	x	x	x	x	x	x	O
Special Foreign Currency Program.....	x	x	x	x	x	x	x	x	x	O
Department of the Air Force	x	x	x	x	x	x	x	x	x	x
Military Construction	x	x	x	x	x	x	x	x	x	O
Pay & Allowances of Military Personnel in R&D	x	x	x	x	x	x	x	x	x	O
RDT&E Appropriation	x	x	x	x	x	x	x	x	x	O
Defense Agencies.....	x	x	x	x	x	x	x	x	x	x
Ballistic Missile Defense Organization.....	O	O	O	O	O	O	O	O	O	O
Defense Advanced Research Projects Agency	O	O	O	O	O	O	O	O	O	O

See explanatory information and SOURCE at end of table.

Table A-1. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 28 37

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Agency	Vol 28	Vol 29	Vol 30	Vol 31	Vol 32	Vol 33	Vol 34	Vol 35	Vol 36	Vol 37
Department of Defense continued										
Defense Information Systems Agency.....	O	O	O	O	O	O	O	O	O	O
Defense Logistics Agency.....	O	O	O	O	O	O	O	O	O	O
Defense Special Weapons Agency.....	O	O	O	O	O	O	O	O	O	O
Joint Staff	O	O	O	O	O	O	O	O	O	O
National Imagery & Mapping Agency	x	x	x	x	x	O	x	x	O	O
Special Operations Command.....	O	O	O	O	O	x	x	x	O	O
Uniformed Services University of the Health Sciences.....	O	O	O	O	O	O	O	O	O	O
Washington Headquarters Services.....	x	x	x	x	x	x	x	x	O	O
Defense Civil Preparedness Agency.....	x	x	N	N	N	N	N	N	N	N
Health Affairs, Assistant Secretary of Defense for.....	N	N	N	N	N	N	N	N	N	N
Operational Test & Evaluation, Director	N	N	N	N	N	N	N	N	x	x
Test & Evaluation, Deputy Under Secretary of Defense.....	x	x	x	x	x	x	x	x	x	x
Department of Education	N	x	x	O	x	x	x	x	x	x
Department of Energy	x	x	x	x	x	x	x	x	x	x
Department of Health, Education, & Welfare	T	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, & Mental Health Administration	x	N	N	N	N	N	N	N	N	N
Center for Disease Control.....	x	N	N	N	N	N	N	N	N	N
Food & Drug Administration.....	x	N	N	N	N	N	N	N	N	N
Health Care Financing Administration.....	x	N	N	N	N	N	N	N	N	N
Health Resources Administration	x	N	N	N	N	N	N	N	N	N
Health Services Administration.....	x	N	N	N	N	N	N	N	N	N
National Institute of Education	x	N	N	N	N	N	N	N	N	N
National Institutes of Health	x	N	N	N	N	N	N	N	N	N
Office of Assistant Secretary for Education	x	N	N	N	N	N	N	N	N	N
Office of the Assistant Secretary for Health.....	x	N	N	N	N	N	N	N	N	N
Office of Education	x	N	N	N	N	N	N	N	N	N
Office of Human Development Services.....	x	N	N	N	N	N	N	N	N	N
Office of the Secretary	x	N	N	N	N	N	N	N	N	N
Social Security Administration.....	x	N	N	N	N	N	N	N	N	N
Department of Health & Human Services	N	T	T	T	T	T	T	T	T	T
Administration on Aging	N	N	N	N	N	N	N	N	N	N
Administration for Children & Families.....	N	N	N	N	N	N	N	N	N	N
Agency for Health Care Policy & Research.....	N	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, & Mental Health Administration	N	x	x	x	x	x	x	x	x	x
Centers for Disease Control & Prevention.....	N	x	x	x	x	x	x	x	x	x
Food & Drug Administration.....	N	x	x	x	x	x	x	x	x	x
Health Care Financing Administration.....	N	x	x	x	x	x	x	x	x	x
Health Resources Administration	N	x	x	x	N	N	N	N	N	N
Health Resources & Services Administration.....	N	x	N	N	x	x	x	x	x	x
Health Services Administration.....	N	x	x	x	N	N	N	N	N	N
Human Development Services.....	N	x	x	x	x	x	x	x	x	x
National Institutes of Health	N	x	x	x	x	x	x	x	x	x
Office of the Assistant Secretary for Health.....	N	x	x	x	x	x	x	x	x	x
Office of the Secretary	N	x	x	x	x	x	x	x	x	x
Office of the Assistant Secretary, Planning & Evaluation.....	N	N	N	N	N	N	N	N	N	N
Office of Public Health & Science.....	N	N	N	N	N	N	N	N	N	N
Social Security Administration.....	N	x	x	x	x	x	x	x	x	x
Substance Abuse & Mental Health Services Administration	N	N	N	N	N	N	N	N	N	N
Department of Housing & Urban Development	x	x	x	x	x	x	x	x	x	x
Department of the Interior	T	T	T	T	T	T	T	T	T	T
Bonneville Power Administration	O	O	O	O	x	N	N	N	N	N

See explanatory information and SOURCE at end of table.

Table A-1. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 28 37

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Agency	Vol 28	Vol 29	Vol 30	Vol 31	Vol 32	Vol 33	Vol 34	Vol 35	Vol 36	Vol 37
Department of the Interior continued										
Bureau of Land Management	x	x	x	x	x	x	x	x	x	X
Bureau of Mines	x	x	x	x	x	x	x	x	x	X
Bureau of Reclamation	x	x	x	x	x	x	x	x	x	X
Geological Survey	x	x	x	x	x	x	x	x	x	X
Heritage Conservation & Recreation Service.....	N	N	N	N	N	N	N	N	N	N
Minerals Management Service	N	N	N	N	x	x	x	x	x	X
National Biological Service	N	N	N	N	N	N	N	N	N	N
National Park Service	X	x	x	x	x	x	x	x	x	x
Office of the Secretary	X	x	x	x	x	x	x	x	x	x
Office of Surface Mining Reclamation & Enforcement.....	X	x	x	x	x	x	x	X	x	x
Office of Water Research & Technology	x	x	x	x	x	x	x	N	N	N
United States Fish & Wildlife Service	x	x	x	x	x	x	x	x	x	x
Department of Justice	T	T	T	T	T	T	T	T	T	T
Bureau of Prisons	x	x	x	x	x	x	x	x	x	x
Drug Enforcement Administration	x	x	x	x	x	x	x	x	x	x
Federal Bureau of Investigation	x	x	x	x	x	x	x	x	x	x
Immigration & Naturalization Service.....	x	x	x	x	x	x	x	x	x	x
Office of Justice Programs.....	x	x	x	x	x	x	x	x	x	x
Office of Legal Policy.....	x	x	x	x	x	x	x	x	x	x
Department of Labor	T	T	T	T	T	T	T	T	T	T
Bureau of Labor Statistics.....	x	x	x	x	x	x	x	x	x	x
Employment Standards Administration	x	x	x	x	x	x	x	x	x	x
Employment & Training Administration.....	x	x	x	x	x	x	x	x	x	x
Labor-Management Relations & Cooperative Programs	N	N	N	N	N	N	x	x	x	x
Labor-Management Services Administration.....	x	x	x	x	x	x	N	N	N	N
Occupational Safety & Health Administration	x	x	x	x	x	x	x	x	x	x
Office of the Secretary	x	x	x	x	x	x	x	x	x	x
Pension Benefit Guaranty Corporation.....	N	N	N	x	x	x	x	x	x	x
Pension & Welfare Benefits Administration	N	N	N	N	N	N	x	x	x	x
Department of State	T	T	T	T	x	x	x	x	x	x
Agency for International Development.....	x	N	N	N	N	N	N	N	N	N
Departmental Funds.....	x	x	x	x	O	O	O	O	O	O
Department of Transportation.....	T	T	T	T	T	T	T	T	T	T
Coast Guard	x	x	x	x	x	x	x	x	x	x
Federal Aviation Administration	x	x	x	x	x	x	x	x	x	x
Federal Highway Administration.....	x	x	x	x	x	x	x	x	x	x
Federal Railroad Administration	x	x	x	x	x	x	x	x	x	x
Federal Transit Administration.....	x	x	x	x	x	x	x	x	x	x
Infrastructure Investment	N	N	N	N	N	N	N	N	N	N
Maritime Administration	N	N	N	x	x	x	x	x	x	x
National Highway Traffic Safety Administration.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary	x	x	x	x	x	x	x	x	x	x
Research & Special Programs Administration.....	x	x	x	x	x	x	x	x	x	x
Department of the Treasury.....	T	T	T	T	T	T	T	T	T	T
Bureau of Alcohol, Tobacco, & Firearms.....	x	x	x	x	N	N	N	N	N	N
Bureau of Engraving & Printing.....	x	x	x	x	x	x	x	x	x	x
Financial Crimes Enforcement Network.....	O	O	O	O	O	O	O	O	O	O
Internal Revenue Service.....	x	x	x	x	x	x	x	x	x	x
Office of Thrift Supervision.....	N	N	N	N	N	N	N	N	N	N
United States Customs Service	x	x	x	x	x	x	x	x	x	x
United States Mint.....	O	O	O	O	O	O	x	x	x	x
United States Secret Service.....	N	N	N	x	x	x	x	x	x	x

See explanatory information and SOURCE at end of table.

Table A-1. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 28 37

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Agency	Vol 28	Vol 29	Vol 30	Vol 31	Vol 32	Vol 33	Vol 34	Vol 35	Vol 36	Vol 37
Department of Veterans Affairs.....	x	x	x	x	x	x	x	x	x	x
Other agencies										
ACTION.....	x	x	O	O	O	O	O	O	O	O
Advisory Commission on Intergovernmental Relations	x	x	x	x	x	x	x	x	x	x
Appalachian Regional Commission.....	x	x	x	x	x	x	x	x	x	x
Civil Service Commission	N	N	N	N	N	N	N	N	N	N
Community Services Administration.....	x	x	x	x	N	N	N	N	N	N
Consumer Product Safety Commission	x	x	x	x	x	x	x	x	x	x
Energy Security Trust Fund	N	x	N	N	N	N	N	N	N	N
Environmental Protection Agency.....	x	x	x	x	x	x	x	x	x	x
Federal Communications Commission.....	x	x	x	x	x	x	x	x	x	x
Federal Emergency Management Agency.....	T	x	x	x	x	x	x	x	O	O
National Fire Prevention & Control Administration.....	x	O	O	O	O	O	O	O	O	O
Federal Trade Commission	x	x	x	x	x	x	x	x	x	x
Foundation for Educational Assistance.....	N	N	N	x	N	N	N	N	N	N
General Services Administration.....	x	T	x	x	x	x	x	x	x	x
International Development Cooperation Agency	N	T	T	T	T	T	T	T	T	T
Agency for International Development	N	x	x	x	x	x	x	x	x	x
Institute for Scientific & Technological Cooperation	O	x	O	O	O	O	O	O	O	O
Interstate Commerce Commission	x	x	x	O	O	O	O	O	O	O
Library of Congress.....	x	x	x	x	x	x	x	x	x	x
National Aeronautics & Space Administration.....	x	x	x	x	x	x	x	x	x	x
National Archives & Records Administration	N	N	N	N	N	N	N	x	x	x
National Science Foundation.....	x	x	x	x	x	x	x	x	x	x
Nuclear Regulatory Commission.....	x	x	x	x	x	x	x	x	x	x
Office of Personnel Management	x	x	x	x	O	O	O	O	O	O
Office of Thrift Supervision	x	x	x	x	x	x	x	x	x	x
Small Business Administration.....	O	O	O	O	O	O	O	O	O	O
Smithsonian Institution.....	x	x	x	x	x	x	x	x	x	x
Social Security Administration	N	N	N	N	N	N	N	N	N	N
Tennessee Valley Authority	x	x	x	x	x	x	x	x	x	x
United States Arms Control & Disarmament Agency.....	x	x	x	x	x	x	x	x	x	x
United States Information Agency	x	x	x	x	x	x	x	x	x	x
United States International Trade Commission	x	x	x	x	x	x	x	x	x	x

NOTE: Federal funds data, as collected, always span 3 Government fiscal years: the fiscal year just completed, the current fiscal year, and the President's budget year. Actual data are collected for the year just completed, and estimates are obtained for the current fiscal year and the budget year. For Volume 47 (see table A-2), for example, actual data were collected for FY 1997 and estimates were collected for FYs 1998 and 1999.

KEY: N = The agency did not exist as such; therefore, no data are available.
O = The agency existed but had no R&D to report.
T = The agency existed but data were not collected at this level.
x = The agency existed and data were collected and submitted by the agency.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

Table A-2. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 38 47

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Agency	Vol 38	Vol 39	Vol 40	Vol 41	Vol 42	Vol 43	Vol 44	Vol 45	Vol 46	Vol 47
Department of Agriculture.....	T	T	T	T	T	T	T	T	T	T
Agricultural Cooperative Service.....	x	X	x	x	x	x	x	N	N	N
Agricultural Marketing Service.....	x	x	x	x	x	x	x	x	x	x
Agricultural Research Service.....	x	X	x	x	x	x	x	x	x	x
Agricultural Stabilization & Conservation Service.....	O	O	O	O	O	O	O	N	N	N
Animal & Plant Health Inspection Service.....	x	x	x	x	x	x	x	x	x	x
Cooperative State Research, Education, & Extension Service.....	x	x	X	x	x	x	x	x	x	x
Economic Research Service.....	x	x	X	x	x	x	x	x	x	x
Economics, Statistics, & Cooperative Service.....	N	N	N	N	N	N	N	N	N	N
Economics & Statistics Service.....	N	N	N	N	N	N	N	N	N	N
Food Safety Inspection Service.....	O	O	O	O	O	O	O	O	x	x
Foreign Agricultural Service.....	O	O	O	O	O	x	x	x	x	x
Forest Service.....	x	x	x	x	x	x	x	x	x	x
Grain Inspection Packers & Stockyards Administration.....	x	x	x	x	x	x	x	x	x	x
Human Nutrition Information Service.....	x	x	x	x	x	x	x	N	N	N
National Agricultural Statistics Service.....	x	x	x	x	x	x	x	x	x	x
Office of International Cooperation & Development.....	x	x	x	x	x	x	x	N	N	N
Office of Transportation.....	x	N	N	N	N	N	N	N	N	N
Rural Business-Cooperative Service.....	N	N	N	N	N	N	x	x	x	x
Science & Education Administration.....	N	N	N	N	N	N	N	N	N	N
Agricultural Research Service.....	N	N	N	N	N	N	N	N	N	N
Cooperative State Research Service.....	N	N	N	N	N	N	N	N	N	N
Department of Commerce.....	T	T	T	T	T	T	T	T	T	T
Bureau of the Census.....	x	x	x	x	x	x	x	x	x	x
Economic Development Administration.....	x	x	x	x	x	x	x	x	x	x
Maritime Administration.....	N	N	N	N	N	N	N	N	N	N
Minority Business Development Agency.....	O	O	O	O	O	O	O	O	O	O
National Fire Prevention & Control Administration.....	N	N	N	N	N	N	N	N	N	N
National Institute of Standards & Technology.....	x	x	x	x	x	x	x	x	x	x
National Oceanic & Atmospheric Administration.....	x	x	x	x	x	x	x	x	x	x
National Telecommunications & Information Administration.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary.....	x	x	x	x	x	x	x	x	x	x
Patent & Trademark Office.....	O	O	O	O	O	O	O	O	O	O
Department of Defense.....	T	T	T	T	T	T	T	T	T	T
Department of the Army, Civil Functions.....	x	x	x	x	x	x	x	x	x	x
Department of the Army, Military Functions.....	x	x	x	x	x	x	x	x	x	x
Military Construction.....	O	O	O	O	O	O	O	O	O	O
Pay & Allowances of Military Personnel in R&D.....	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation.....	O	O	O	O	O	O	O	O	O	O
Special Foreign Currency Program.....	O	O	O	O	O	O	O	O	O	O
Department of the Navy.....	x	x	x	x	x	x	x	x	x	x
Military Construction.....	O	O	O	O	O	O	O	O	O	O
Pay & Allowances of Military Personnel in R&D.....	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation.....	O	O	O	O	O	O	O	O	O	O
Special Foreign Currency Program.....	O	O	O	O	O	O	O	O	O	O
Department of the Air Force.....	x	x	x	x	x	x	x	x	x	x
Military Construction.....	O	O	O	O	O	O	O	O	O	O
Pay & Allowances of Military Personnel in R&D.....	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation.....	O	O	O	O	O	O	O	O	O	O
Defense Agencies.....	T	T	T	T	T	T	T	T	T	T
Ballistic Missile Defense Organization.....	O	O	O	x	x	x	x	x	x	x
Defense Advanced Research Projects Agency.....	O	O	O	x	x	x	x	x	x	x

See explanatory information and SOURCE at end of table.

Table A-2. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 38 47

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Agency	Vol 38	Vol 39	Vol 40	Vol 41	Vol 42	Vol 43	Vol 44	Vol 45	Vol 46	Vol 47
Department of Defense continued										
Defense Information Systems Agency.....	O	O	x	x	x	x	x	x	x	x
Defense Logistics Agency.....	O	O	x	x	x	x	x	x	x	x
Defense Special Weapons Agency.....	O	O	x	x	x	x	x	x	x	x
Joint Staff.....	O	O	x	x	x	x	x	x	x	x
National Imagery & Mapping Agency.....	O	O	x	x	x	x	x	x	O	x
Special Operations Command.....	O	O	x	x	x	x	x	x	x	x
Uniformed Services University of the Health Sciences.....	O	O	x	x	x	x	x	N	N	N
Washington Headquarters Services.....	O	O	x	x	x	X	x	x	x	x
Defense Civil Preparedness Agency.....	N	N	N	N	N	N	N	N	N	N
Health Affairs, Assistant Secretary of Defense for.....	N	N	N	x	O	O	O	O	O	O
Operational Test & Evaluation, Director.....	x	x	x	x	x	x	x	x	x	x
Test & Evaluation, Deputy Under Secretary of Defense.....	x	x	x	x	x	x	x	x	x	x
Department of Education	x	x	x	x	x	x	x	x	x	x
Department of Energy	x	x	x	x	x	x	x	x	x	x
Department of Health, Education, & Welfare	N	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, & Mental Health Administration.....	N	N	N	N	N	N	N	N	N	N
Center for Disease Control.....	N	N	N	N	N	N	N	N	N	N
Food & Drug Administration.....	N	N	N	N	N	N	N	N	N	N
Health Care Financing Administration.....	N	N	N	N	N	N	N	N	N	N
Health Resources Administration.....	N	N	N	N	N	N	N	N	N	N
Health Services Administration.....	N	N	N	N	N	N	N	N	N	N
National Institute of Education.....	N	N	N	N	N	N	N	N	N	N
National Institutes of Health.....	N	N	N	N	N	N	N	N	N	N
Office of Assistant Secretary for Education.....	N	N	N	N	N	N	N	N	N	N
Office of the Assistant Secretary for Health.....	N	N	N	N	N	N	N	N	N	N
Office of Education.....	N	N	N	N	N	N	N	N	N	N
Office of Human Development Services.....	N	N	N	N	N	N	N	N	N	N
Office of the Secretary.....	N	N	N	N	N	N	N	N	N	N
Social Security Administration.....	N	N	N	N	N	N	N	N	N	N
Department of Health & Human Services	T	T	T	T	T	T	T	T	T	T
Administration on Aging.....	N	N	N	x	x	x	x	x	x	x
Administration for Children & Families.....	N	N	N	x	x	x	x	x	x	x
Agency for Health Care Policy & Research.....	N	N	N	x	x	x	x	x	x	x
Alcohol, Drug Abuse, & Mental Health Administration.....	x	x	x	x	N	N	N	N	N	N
Centers for Disease Control & Prevention.....	x	x	x	x	x	x	x	x	x	x
Food & Drug Administration.....	x	x	x	x	x	x	x	x	x	x
Health Care Financing Administration.....	x	x	x	x	x	x	x	x	x	x
Health Resources Administration.....	N	N	N	N	N	N	N	N	N	N
Health Resources & Services Administration.....	x	x	x	x	x	x	x	x	x	x
Health Services Administration.....	N	N	N	N	N	N	N	N	N	N
Human Development Services.....	x	x	x	N	N	N	N	N	N	N
National Institutes of Health.....	x	x	x	x	x	x	x	x	x	x
Office of the Assistant Secretary for Health.....	x	x	x	x	x	x	x	x	N	N
Office of the Secretary.....	x	x	x	x	x	x	x	x	T	T
Office of the Assistant Secretary, Planning & Evaluation.....	N	N	N	N	N	N	N	N	x	x
Office of Public Health & Science.....	N	N	N	N	N	N	N	N	x	x
Social Security Administration.....	x	x	x	x	x	x	x	x	N	N
Substance Abuse & Mental Health Services Administration.....	N	N	N	N	N	N	N	N	x	x
Department of Housing & Urban Development	x	x	x	x	x	x	x	x	x	x
Department of the Interior	T	T	T	T	T	T	T	T	T	T
Bonneville Power Administration.....	N	N	N	N	N	N	N	N	N	N

See explanatory information and SOURCE at end of table.

Table A-2. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 38 47

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Agency	Vol 38	Vol 39	Vol 40	Vol 41	Vol 42	Vol 43	Vol 44	Vol 45	Vol 46	Vol 47
Department of the Interior continued										
Bureau of Land Management.....	x	x	x	x	x	x	O	O	O	O
Bureau of Mines.....	x	x	x	x	x	x	x	O	N	N
Bureau of Reclamation.....	x	x	x	x	x	x	x	x	x	x
Geological Survey.....	x	x	x	x	x	x	x	x	x	x
Heritage Conservation & Recreation Service.....	N	N	N	N	N	N	N	N	N	N
Minerals Management Service.....	x	x	x	x	x	x	x	x	x	x
National Biological Service.....	N	N	N	N	N	x	x	x	N	N
National Park Service.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary.....	x	x	x	x	x	x	x	x	O	O
Office of Surface Mining Reclamation & Enforcement.....	x	x	x	x	x	x	x	O	O	O
Office of Water Research & Technology.....	N	N	N	N	N	N	N	N	N	N
United States Fish & Wildlife Service.....	x	x	x	x	x	x	O	O	O	O
Department of Justice	T	T	T	T	T	T	T	T	T	T
Bureau of Prisons.....	x	x	x	x	x	x	x	x	x	x
Drug Enforcement Administration.....	x	x	x	x	x	x	x	x	x	x
Federal Bureau of Investigation.....	x	x	x	x	x	x	x	x	x	x
Immigration & Naturalization Service.....	x	x	x	x	x	x	x	x	x	x
Office of Justice Programs.....	x	x	x	x	x	x	x	x	x	x
Office of Legal Policy.....	O	O	O	O	O	O	O	O	O	O
Department of Labor	T	T	T	T	T	T	T	T	T	T
Bureau of Labor Statistics.....	x	x	x	x	x	x	x	x	x	x
Employment Standards Administration.....	x	x	x	O	O	O	O	O	O	O
Employment & Training Administration.....	x	x	x	x	x	x	x	x	x	x
Labor-Management Relations & Cooperative Programs.....	x	x	x	N	N	N	N	N	N	N
Labor-Management Services Administration.....	N	N	N	N	N	N	N	N	N	N
Occupational Safety & Health Administration.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary.....	x	x	x	x	x	x	x	x	x	x
Pension Benefit Guaranty Corporation.....	x	x	x	x	x	x	x	x	x	x
Pension & Welfare Benefits Administration.....	x	x	x	x	x	x	x	x	x	x
Department of State	x	x	x	x	x	x	x	x	x	x
Agency for International Development.....	N	N	N	N	N	N	N	N	N	N
Departmental Funds.....	O	O	O	O	O	O	O	O	O	O
Department of Transportation	T	T	T	T	T	T	T	T	T	T
Coast Guard.....	x	x	x	x	x	x	x	x	x	x
Federal Aviation Administration.....	x	x	x	x	x	x	x	x	x	x
Federal Highway Administration.....	x	x	x	x	x	x	x	x	x	x
Federal Railroad Administration.....	x	x	x	x	x	x	x	x	x	x
Federal Transit Administration.....	x	x	x	x	x	x	x	x	x	x
Infrastructure Investment.....	N	N	N	N	N	N	x	N	N	N
Maritime Administration.....	x	O	x	x	x	x	x	x	O	O
National Highway Traffic Safety Administration.....	x	x	x	x	x	x	x	x	x	x
Office of the Secretary.....	x	x	x	x	x	x	x	x	x	x
Research & Special Programs Administration.....	x	x	x	x	x	x	x	x	x	x
Department of the Treasury	T	T	T	T	T	T	T	T	T	T
Bureau of Alcohol, Tobacco, & Firearms.....	N	N	N	N	N	N	N	N	N	N
Bureau of Engraving & Printing.....	x	x	x	x	x	x	x	x	x	x
Financial Crimes Enforcement Network.....	O	O	O	x	x	x	O	O	O	O
Internal Revenue Service.....	x	x	x	x	x	x	x	x	x	x
Office of Thrift Supervision.....	N	N	O	x	x	x	x	x	x	x
United States Customs Service.....	x	x	x	x	x	x	x	x	x	x
United States Mint.....	x	x	x	x	x	x	x	x	x	x
United States Secret Service.....	x	x	x	x	x	x	x	x	x	x

See explanatory information and SOURCE at end of table.

Table A-2. Agencies included in the Survey of Federal Funds for Research and Development: Volumes 38 47

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Agency	Vol 38	Vol 39	Vol 40	Vol 41	Vol 42	Vol 43	Vol 44	Vol 45	Vol 46	Vol 47
Department of Veterans Affairs.....	x	x	x	x	x	x	x	x	x	x
Other agencies										
ACTION.....	O	O	O	O	O	O	O	O	O	O
Advisory Commission on Intergovernmental Relations.....	x	x	x	x	x	x	x	x	N	N
Appalachian Regional Commission.....	x	x	x	x	x	x	x	x	x	x
Civil Service Commission.....	N	N	N	N	N	N	N	N	N	N
Community Services Administration.....	N	N	N	N	N	N	N	N	N	N
Consumer Product Safety Commission.....	x	x	x	x	x	x	x	x	x	x
Energy Security Trust Fund.....	N	N	N	N	N	N	N	N	N	N
Environmental Protection Agency.....	x	x	x	x	x	x	x	x	x	x
Federal Communications Commission.....	x	x	x	x	x	x	x	x	x	x
Federal Emergency Management Agency.....	O	O	O	O	O	O	O	O	O	O
National Fire Prevention & Control Administration.....	O	O	O	O	O	O	O	O	O	O
Federal Trade Commission.....	x	x	x	x	x	x	x	x	x	x
Foundation for Educational Assistance.....	N	N	N	N	N	N	N	N	N	N
General Services Administration.....	x	x	x	x	x	x	x	x	x	x
International Development Cooperation Agency.....	T	T	T	T	T	T	T	T	T	T
Agency for International Development.....	x	x	x	x	x	x	x	x	x	x
Institute for Scientific & Technological Cooperation.....	O	O	O	O	O	O	O	O	O	O
Interstate Commerce Commission.....	O	O	O	O	O	O	O	O	O	O
Library of Congress.....	x	x	x	x	x	x	x	x	x	x
National Aeronautics & Space Administration.....	x	x	x	x	x	x	x	x	x	x
National Archives & Records Administration.....	x	x	x	x	x	x	x	x	x	x
National Science Foundation.....	x	x	x	x	x	x	x	x	x	x
Nuclear Regulatory Commission.....	x	x	x	x	x	x	x	x	x	x
Office of Personnel Management.....	O	O	O	O	O	O	O	O	O	O
Office of Thrift Supervision.....	x	x	x	N	N	N	N	N	N	N
Small Business Administration.....	O	O	O	O	O	O	O	O	O	O
Smithsonian Institution.....	x	x	x	x	x	x	x	x	x	x
Social Security Administration.....	N	N	N	N	N	N	N	N	x	x
Tennessee Valley Authority.....	x	x	x	x	x	x	x	x	x	x
United States Arms Control & Disarmament Agency.....	x	x	x	x	x	x	x	x	x	x
United States Information Agency.....	x	x	x	x	x	x	x	x	x	x
United States International Trade Commission.....	x	x	x	x	x	x	x	x	x	x

NOTE: Federal funds data, as collected, always span 3 Government fiscal years: the fiscal year just completed, the current fiscal year, and the President's budget year. Actual data are collected for the year just completed, and estimates are obtained for the current fiscal year and the budget year. For Volume 47, for example, actual data were collected for FY 1997 and estimates were collected for FYs 1998 and 1999.

KEY: N = The agency did not exist as such; therefore, no data are available.
O = The agency existed but had no R&D to report.
T = The agency existed but data were not collected at this level.
x = The agency existed and data were collected and submitted by the agency.

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999

APPENDIX B.

NOTES ASSOCIATED WITH AGENCIES
INCLUDED IN THIS SURVEY,
VOLUMES 28 TO 47

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
Volumes 28-47**

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Department of Agriculture	
Agricultural Cooperative Service	
Agricultural Marketing Service	Although the Agricultural Marketing Service was established in April 1972, fiscal year 1979 was the first year in which Congress appropriated funds to this agency. Data reported for the Agricultural Marketing Service include funds for the Office of Transportation beginning in 1989.
Agricultural Research Service	The Human Nutrition Information Service merged with the Agricultural Research Service on Feb. 20, 1994.
Agricultural Stabilization & Conservation Service	The Agricultural Stabilization & Conservation Service was abolished as of Oct. 20, 1994.
Animal & Plant Health Inspection Service	
Cooperative State Research, Education, & Extension Service	The Cooperative State Research Service merged with the Extension Service on Oct. 19, 1994, to become the Cooperative State Research, Education, and Extension Service, due to a reorganization within the Department of Agriculture.
Economic Research Service	
Economics, Statistics, & Cooperative Service	Data reported for the Economics, Statistics, & Cooperative Service include programs of the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service for fiscal years 1977-79.
Economics & Statistics Service	Data reported for the Economics & Statistics Service include programs of the Economic Research Service and the Statistical Reporting Service for fiscal year 1980.
Food Safety Inspection Service	
Foreign Agricultural Service	The Office of International Cooperation & Development became part of the Foreign Agricultural Service (FAS) in June 1994. Data reported for FAS include funds appropriated to International Cooperation & Development programs within FAS as of fiscal year 1994.
Forest Service	
Grain Inspection Packers & Stockyards Administration	The Federal Grain Inspection Service was abolished on Oct. 20, 1994, and its functions were assumed by the Grain Inspection Packers & Stockyards Administration.
Human Nutrition Information Service	The Human Nutrition Information Service merged with the Agricultural Research Service on Feb. 20, 1994.
National Agricultural Statistics Service	
Office of International Cooperation & Development	The Office of International Cooperation & Development became part of the Foreign Agricultural Service (FAS) in June 1994. Data reported for FAS include funds appropriated to International Cooperation & Development programs within FAS as of fiscal year 1994.
Office of Transportation	
Rural Business-Cooperative Service	This agency's name changed from the Rural Business & Cooperative Development Service to the Rural Business-Cooperative Service on Jan. 30, 1996.
Science & Education Administration	
Agricultural Research Service	
Cooperative State Research Service	

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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Department of Commerce	
Bureau of the Census	
Economic Development Administration	
Maritime Administration	In 1981 the Maritime Administration moved from the Department of Commerce to the Department of Transportation.
Minority Business Development Agency	
National Fire Prevention & Control Administration	Functions for the National Fire Prevention & Control Administration transferred from the Department of Commerce to the Federal Emergency Management Agency as of Apr. 1, 1979.
National Institute of Standards & Technology	
National Oceanic & Atmospheric Administration	
National Telecommunications & Information Administration	
Office of the Secretary	
Patent & Trademark Office	
Department of Defense	
Department of the Army, Military Functions	
Department of the Army, Civil Functions	
Department of the Navy	
Department of the Air Force	
Defense Agencies	
Ballistic Missile Defense Organization	
Defense Advanced Research Projects Agency	This agency's name changed to the Advanced Research Projects Agency on July 13, 1993, and it was changed back to Defense Advanced Research Projects Agency in February 1996.
Defense Information Systems Agency	
Defense Logistics Agency	
Defense Special Weapons Agency	The Defense Nuclear Agency was renamed the Defense Special Weapons Agency in 1996, as a result of a new charter and an expanded mission.
Joint Staff	The name of this agency changed from Joint Chiefs of Staff to Joint Staff in fiscal year 1986.
National Imagery & Mapping Agency	The Defense Mapping Agency merged with the newly created National Imagery & Mapping Agency on October 1, 1996.
Special Operations Command	
Uniformed Services University of the Health Sciences	Data for the Uniformed Services University of the Health Sciences are included with the Washington Headquarters Services' submission as of Vol. 45.
Washington Headquarters Services	Data for the Uniformed Services University of the Health Sciences are included with the Washington Headquarters Services' submission as of Vol. 45. Public Law No. 103-160, Section 1703 makes the Office of the Secretary of Defense responsible for the Chemical and Biological Defense Program (CBDP). Section 1701 requires the creation of CBDP research, development, test, and evaluation program elements established in the fiscal year 1996-1997 President's Budget. Data for these new program elements are included in the Federal funds survey as of Vol. 46.

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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Defense Civil Preparedness Agency	Functions for the Defense Civil Preparedness Agency transferred from the Department of Defense to the Federal Emergency Management Agency on July 20, 1979.
Health Affairs, Assistant Secretary of Defense for	
Operational Test & Evaluation, Director	
Test & Evaluation, Deputy Under Secretary of Defense	
Department of Education	
Department of Energy	In 1977 the Energy Research & Development Administration became part of the Department of Energy. In fiscal year 1982 the Bonneville Power Administration became part of the Department of Energy.
Department of Health, Education, & Welfare	
Alcohol, Drug Abuse, & Mental Health Administration	
Center for Disease Control	
Food & Drug Administration	
Health Care Financing Administration	
Health Resources Administration	
Health Services Administration	
National Institute of Education	
National Institutes of Health	
Office of Assistant Secretary for Education	
Office of the Assistant Secretary for Health	
Office of Education	
Office of Human Development Services	
Office of the Secretary	
Social Security Administration	
Department of Health & Human Services	
Administration on Aging	In fiscal year 1991 Human Development Services was replaced by the Administration for Children & Families (ACF) and by the Administration on Aging (AoA). Beginning in fiscal year 1992, data shown for the ACF are separate from obligations for the AoA.
Administration for Children & Families	Obligations reported for the Administration for Children & Families may be incomplete for fiscal year 1992 due to unavailability of data. In fiscal year 1991 Human Development Services was replaced by the Administration for Children & Families (ACF) and by the Administration on Aging (AoA). Beginning in fiscal year 1992, data shown for the ACF are separate from obligations for the AoA.
Agency for Health Care Policy & Research	In fiscal year 1991 the Agency for Health Care Policy & Research became separate from the Office of the Assistant Secretary for Health.
Alcohol, Drug Abuse, & Mental Health Administration	
Centers for Disease Control & Prevention	
Food & Drug Administration	
Health Care Financing Administration	
Health Resources Administration	

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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Health Resources & Services Administration	
Health Services Administration	
Human Development Services	In fiscal year 1991 Human Development Services was replaced by the Administration for Children & Families (ACF) and by the Administration on Aging (AoA). Beginning in fiscal year 1992, data shown for the ACF are separate from obligations for the AoA.
National Institutes of Health	
Office of the Assistant Secretary for Health	In fiscal year 1991 the Agency for Health Care Policy & Research became separate from the Office of the Assistant Secretary for Health. As of fiscal year 1996, the Office of the Assistant Secretary for Health (OASH) merged with the Office of the Secretary (OS). The merger created a new role for the Assistant Secretary for Health who became head of the Office of Public Health and Science (OPHS), a new division within OS.
Office of the Secretary	As of fiscal year 1996, the Office of the Assistant Secretary for Health (OASH) merged with the Office of the Secretary (OS). The merger created a new role for the Assistant Secretary for Health who became head of the Office of Public Health and Science (OPHS), a new division within OS.
Office of the Assistant Secretary, Planning & Evaluation	
Office of Public Health & Science	As of fiscal year 1996, the Office of the Assistant Secretary for Health (OASH) merged with the Office of the Secretary (OS). The merger created a new role for the Assistant Secretary for Health who became head of the Office of Public Health and Science (OPHS), a new division within OS.
Social Security Administration	As of Mar. 31, 1995, the Social Security Administration became an independent agency; it is no longer part of the Department of Health & Human Services.
Substance Abuse & Mental Health Services Administration	
Department of Housing & Urban Development	
Department of the Interior	
Bonneville Power Administration	In fiscal year 1982 the Bonneville Power Administration became part of the Department of Energy.
Bureau of Land Management	
Bureau of Mines	In January 1996 the Bureau of Mines was abolished, and some of its activities were transferred to the Bureau of Land Management, the Geological Survey, and the Department of Energy.
Bureau of Reclamation	
Geological Survey	As of 1985 the Office of Water Research & Technology has been combined with the Geological Survey. As of fiscal year 1996, data for the National Biological Service (NBS) are included with the Geological Survey's submission, since NBS's funding comes from the Geological Survey's congressional appropriation.
Minerals Management Service	
National Biological Service	The National Biological Service's (NBS) name changed from the National Biological Survey on Jan. 5, 1995. As of fiscal year 1994, NBS performs all biological research activities formerly funded by the United States Fish & Wildlife Service and the National Park Service. As of fiscal year 1996, data for the National Biological Service (NBS) are included with the Geological Survey's submission, since NBS's funding comes from the Geological Survey's congressional appropriation.

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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National Park Service	The National Biological Service's (NBS) name changed from the National Biological Survey on Jan. 5, 1995. As of fiscal year 1994, NBS performs all biological research activities formerly funded by the United States Fish & Wildlife Service and the National Park Service.
Office of the Secretary	The Department of Interior's Office of the Secretary has not funded any R&D activities since fiscal year 1995.
Office of Surface Mining Reclamation & Enforcement	
Office of Water Research & Technology	As of 1985 the Office of Water Research & Technology has been combined with the Geological Survey.
United States Fish & Wildlife Service	The National Biological Service's (NBS) name changed from the National Biological Survey on Jan. 5, 1995. As of fiscal year 1994, NBS performs all biological research activities formerly funded by the United States Fish & Wildlife Service and the National Park Service.
Department of Justice	
Bureau of Prisons	The Bureau of Prisons was formerly listed as the Federal Prison System.
Drug Enforcement Administration	
Federal Bureau of Investigation	
Immigration & Naturalization Service	
Office of Justice Programs	
Office of Legal Policy	
Department of Labor	
Bureau of Labor Statistics	
Employment Standards Administration	
Employment & Training Administration	
Labor-Management Relations & Cooperative Programs	In 1984 the Labor-Management Services Administration was replaced by Labor-Management Relations & Cooperative Programs.
Labor-Management Services Administration	In 1984 the Labor-Management Services Administration was replaced by Labor-Management Relations & Cooperative Programs.
Occupational Safety & Health Administration	
Office of the Secretary	
Pension Benefit Guaranty Corporation	
Pension & Welfare Benefits Administration	
Wage & Hour Division	
Department of State	
	The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on Oct. 1, 1979.
	Increases in outlays and obligations reported by the Department of State during the Vol. 44 survey cycle reflect reporting of monies received through interagency agreements with the Agency for International Development. The Department of State transfers these outlays and obligations to other R&D performers.
Agency for International Development	The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on Oct. 1, 1979.
Departmental Funds	

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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Department of Transportation	
Coast Guard	
Federal Aviation Administration	
Federal Highway Administration	
Federal Railroad Administration	
Federal Transit Administration	The name of this agency changed from the Urban Mass Transit Administration to the Federal Transit Administration on Dec. 18, 1991.
Maritime Administration	In 1981 the Maritime Administration moved from the Department of Commerce to the Department of Transportation. Beginning with fiscal year 1996, the Maritime Administration has had no directly appropriated funding for research and development activities.
National Highway Traffic Safety Administration	
Office of the Secretary	
Research & Special Programs Administration	
Department of the Treasury	
Bureau of Alcohol, Tobacco, & Firearms	
Bureau of Engraving & Printing	
Financial Crimes Enforcement Network	
Internal Revenue Service	Due to the reorganization of the Internal Revenue Service and subsequent unavailability of data, fiscal year 1992 figures are taken from estimates made in the Vol. 41 submission. Large changes in obligations reported by the Internal Revenue Service for Vol. 44 are due to shifts in research funding.
Office of Thrift Supervision	In 1989 the Federal Home Loan Bank Board was replaced by the Office of Thrift Supervision. In 1990 the Office of Thrift Supervision became part of the Department of the Treasury.
United States Customs Service	
United States Mint	
United States Secret Service	The United States Secret Service was formerly listed as the Office of Protective Research.
Department of Veterans Affairs	
Other agencies	
ACTION	
Advisory Commission on Intergovernmental Relations	
Appalachian Regional Commission	
Community Services Administration	
Consumer Product Safety Commission	
Environmental Protection Agency	
Federal Communications Commission	

See explanatory information and SOURCE at end of table.

**Table B. Notes associated with agencies included in the Survey of Federal Funds for Research and Development:
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Federal Emergency Management Agency	Functions for the Defense Civil Preparedness Agency transferred from the Department of Defense to the Federal Emergency Management Agency on July 20, 1979.
National Fire Prevention & Control Administration	Functions for the National Fire Prevention & Control Administration transferred from the Department of Commerce to the Federal Emergency Management Agency as of Apr. 1, 1979.
Federal Trade Commission	
Foundation for Educational Assistance	The 1983 Budget of the United States Government proposed that the Department of Education be replaced by the Foundation for Educational Assistance.
General Services Administration	As of 1985 the National Archives & Records Administration is separate from the General Services Administration.
International Development Cooperation Agency	The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on Oct. 1, 1979.
Agency for International Development	Increases in outlays and obligations reported by the Department of State during the Vol. 44 survey cycle reflect reporting of monies received through interagency agreements with the Agency for International Development. The Department of State transfers these outlays and obligations to other R&D performers.
Institute for Scientific & Technological Cooperation	
Interstate Commerce Commission	
Library of Congress	
National Aeronautics & Space Administration	
National Archives & Records Administration	As of 1985 the National Archives & Records Administration is separate from the General Services Administration.
National Science Foundation	
Nuclear Regulatory Commission	
Office of Personnel Management	
Office of Thrift Supervision	In 1989 the Federal Home Loan Bank Board was replaced by the Office of Thrift Supervision. In 1990 the Office of Thrift Supervision became part of the Department of the Treasury.
Smithsonian Institution	
Social Security Administration	As of Mar. 31, 1995, the Social Security Administration became an independent agency; it is no longer part of the Department of Health & Human Services.
Tennessee Valley Authority	
United States Arms Control & Disarmament Agency	Fiscal year 1994 figures for the United States Arms Control & Disarmament Agency are estimates based on the agency's Vol. 43 submission.
United States Information Agency	Data reported for the United States Information Agency include funds for the former International Communication Agency for fiscal years 1977-81.
United States International Trade Commission	

SOURCE: National Science Foundation/SRS, Survey of Federal Funds for Research and Development: Fiscal Years 1997, 1998, and 1999